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AESOP

BY

CLIFFORD D. SIMAK

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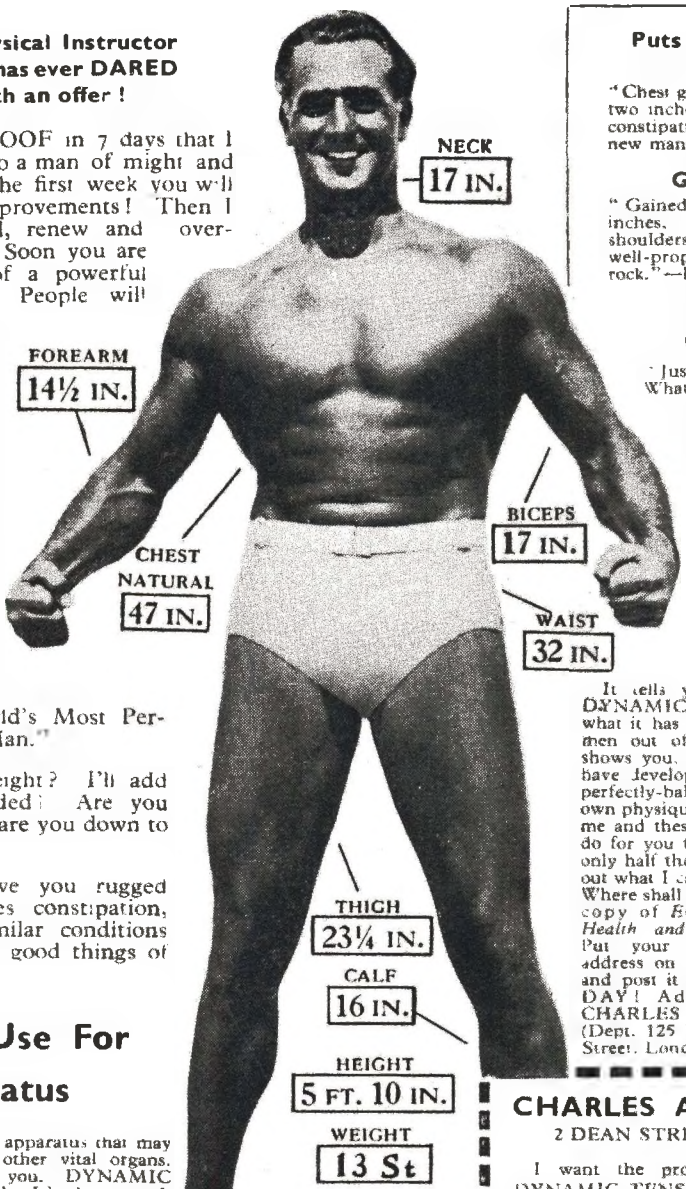

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Astounding
SCIENCE FICTION

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Contents

All stories in this magazine are fiction. No actual persons are designated either by name or character. Any similarity is coincidental.

The old robot had made a better world of it than Man had. But there was still the problem of the Websters—who were curious, and their curiosity was deadly, its end predictable. But there was a solution—

AESOP

By CLIFFORD D. SIMAK

THE gray shadow slid along the rocky ledge, heading for the den, mewing to itself in frustration and bitter disappointment—for the Words had failed.

The slanting sun of early afternoon picked out a face and head and body, indistinct and murky, like a haze of morning mist rising from a gully.

Suddenly the ledge pinched off and the shadow stopped, bewildered, crouched against the rocky wall—for there was no den. The ledge pinched off before it reached the den!

It whirled around like a snapping whip, stared back across the valley. And the river was all wrong. It flowed closer to the bluffs than it had flowed before. There was a swallow's nest on the rocky wall and there'd never been a swallow's nest before.

The shadow stiffened and the tufted tentacles upon its ears came up and searched the air.

There was life! The scent of it lay faith upon the air, the feel of it vibrated across the empty notches of the marching hills.

The shadow stirred, came out of its crouch, flowed along the ledge.

There was no den and the river was different and there was a swallow's nest plastered on the cliff.

The shadow quivered, drooling mentally.

The Words had been right. They had not failed. This was a different world.

A different world—different in more ways than one. A world so full of life that it hummed in the very air. Life, perhaps, that could not run so fast nor hide so well.

The wolf and bear met beneath the great oak tree and stopped to pass the time of day.

"I hear," said Lupus, "there's been killing going on."

Bruin grunted. "A funny kind of killing, brother. Dead, but not eaten."

"Symbolic killing," said the wolf.

Bruin shook his head. "You can't tell me there's such a thing as symbolic killing. This new psychology the Dogs are teaching us is going just a bit too far. When there's killing going on, it's for either hate or hunger. You wouldn't

catch me killing something that I didn't eat."

He hurried to put matters straight. "Not that I'm doing any killing, brother. You know that."

"Of course not," said the wolf.

Bruin closed his small eyes lazily, opened them and blinked. "Not, you understand, that I don't turn over a rock once in a while and lap up an ant or two."

"I don't believe the Dogs would consider that killing," Lupus told him, gravely. "Insects are a little different than animals and birds. No one has ever told us we can't kill insect life."

"That's where you're wrong," said Bruin. "The Canons say so very distinctly. You must not destroy life. You must not take another's life."

"Yes, I guess they do," the wolf admitted sanctimoniously. "I guess you're right, at that, brother. But even, the Dogs aren't too fussy about a thing like insects. Why, you know, they're trying all the time to make a better flea powder. And what's flea powder for, I ask you? Why, to kill fleas. That's what it's for. And fleas are life. Fleas are living things.

Bruin slapped viciously at a small green fly buzzing past his nose.

"I'm going down to the feeding station," said the wolf. "Maybe you would like to join me."

"I don't feel hungry," said the bear. "And, besides, you're a bit too early. Ain't time for feeding yet."

Lupus ran his tongue around his muzzle. "Sometimes I just drift in, casual-like you know, and the Webster that's in charge gives me something extra."

"Want to watch out," said Bruin. "He isn't giving you something extra for nothing. He's got something up his sleeve. I don't trust them Websters."

"This one's all right," the wolf declared. "He runs the feeding station and he doesn't have to. Any robot could do it. But he went and asked for the job. Got tired of lolling around in them foxed-up houses, with nothing to do but play. And he sits around and laughs and talks, just like he was one of us. That Peter is a good Joe."

The bear rumbled in his throat. "One of the Dogs was telling me that Jenkins claims Webster ain't their name at all. Says the aren't Websters. Says that they are men—"

"What's men?" asked Lupus.

"Why, I was just telling you. It's what Jenkins says—"

"Jenkins," declared Lupus, "is getting so old he's all twisted up. Too much to remember. Must be all of a thousand years."

"Seven thousand," said the bear. "The Dogs are figuring on having a big birthday party for him. They're fixing up a new body for him for a gift. The old one he's got is wearing out—in the repair shop every month or two."

The bear wagged his head sagely. "All in all, Lupus, the Dogs have done a lot for us. Setting up feeding stations and sending out medical robots and everything. Why, only last year I had a raging toothache—"

The wolf interrupted. "But those feeding stations might be better. They claim that yeast is just the same as meat, has the same food value and everything. But It don't taste like meat—"

"How do you know?" asked Bruin.

The wolf's stutter lasted one split second. "Why . . . why, from what my granddad told me. Regular old hellion, my granddad. He had him some venison every now and then. Told me how red meat tasted. But then they didn't have so many wardens as they have nowadays."

Bruin closed his eyes, opened them again. "I been wondering how fish taste," he said. "There's a bunch of trout down in Pine Tree creek. Been watching them. Easy to reach down with my paw and scoop me out a couple."

He added hastily. "Of course, I never have."

"Of course not," said the wolf.

One world and then another, running like a chain. One world treading on the heels of another world that plodded just ahead. One world's tomorrow another world's today. And yesterday is tomorrow and tomorrow is the past.

Except, there wasn't any past. No past, that was, except the figment of remembrance that fitted like a night-winged thing in the shadow of one's mind. No past that one could reach. No pictures painted on the wall of time. No film that one could run backward and see what-once-had-been.

Joshua got up and shook himself, sat down and scratched a flea. Ichabod sat stiffly at the table, metal fingers tapping.

"It checks," the robot said. "There's nothing we can do about it. The factors check. We can't travel in the past."

"No," said Joshua.

"But," said Ichabod, "we know where the cobblies are."

"Yes," said Joshua, "we know where the cobblies are. And maybe we can reach them. Now we know the road to take."

One road was open, but another road was closed. Not closed, of course, for it had never been. For there wasn't any past, there never had been any, there wasn't room for one. Where there should have been a past there was another world.

Like two dogs walking in one another's tracks. One dog steps out and another dog steps in. Like a long, endless row of ball bearings running down a groove, almost touching, but not quite. Like the links of an endless chain running on a wheel with a billion billion sprokets.

"We're late," said Ichabod, glancing at the clock. "We should be getting ready to go to Jenkins' party."

Joshua shook himself again. "Yes, I suppose we should. It's a great day for Jenkins, Ichabod. Think of it . . . seven thousand years."

"I'm all fixed up," Ichobod said, proudly. "I shined myself this morning, but you need a combing. You've got all tangled up."

"Seven thousand years," said Joshua. "I wouldn't want to live that long."

Seven thousand years and seven thousand worlds stepping in one another's tracks. Although it would be more than that. A world a day. Three hundred sixty-five times seven thousand. Or maybe a world a minute. Or maybe even one world every second. A second was a thick thing —thick enough to separate two worlds, large enough to hold two worlds. Three hundred sixty-five times seven thousand times twenty-four times sixty times sixty—

A thick thing and a final thing. For there was no past. There was no going back. No going back to find out about the things that Jenkins talked about—the things that might be truth or twisted memory warped by seven thousand years. No going back to check up on the cloudy legends that told about a house and a family of Websters and a closed dome of nothingness that squatted in the mountains far across the sea.

Ichabod advanced upon him with a comb and brush and Joshua winced away.

"Ah, shucks," said Ichabod, "I won't hurt you any."

"Last time," said Joshua, "you darn near skinned me alive. Go easy on those snags."

The wolf had come in, hoping for a between-meals snack, but it hadn't been forthcoming and he was too polite to ask. So now he sat, bushy tail tucked neatly around his feet, watching Peter work with the knife upon the slender wand.

Fatso, the squirrel, dropped from the limb of an overhanging tree, lit on Peter's shoulder.

"What you got?" he asked.

"A throwing stick," said Peter.

"You can throw any stick you want to," said the wolf. "You don't need a fancy one to throw. You can pick up just any stick and throw it."

"This is something new," said Peter. "Something I thought up. Something that I made. But I don't know what it is."

"It hasn't got a name?" asked Fatso.

"Not yet," said Peter. "I'll have to think one up."

"But," persisted the wolf, "you can throw. You can throw any stick you want to."

"Not as far," said Peter. "Not as hard."

Peter twirled the wand between his fingers, feeling the smooth roundness of it, lifted it and sighted along it to make sure that it was straight.

"I don't throw it with my arm," said Peter. "I throw it with another stick and a cord."

He reached out and picked up the thing that leaned against the tree trunk.

"What I can't figure out," said Fatso, "is what you want to throw a stick for."

"I don't know," said Peter. "It is kind of fun."

"You Websters," said the wolf, severely, "are funny animals. Sometimes I wonder if you have good sense."

"You can hit any place you aim at," said Peter, "if your throwing stick is straight and your cord is good. You can't just pick up any piece of wood. You have to look and look—"

"Show me," said Fatso.

"Like this," said Peter, lifting up the shaft of hickory. "It's tough, you see. Springy. Bend it and it snaps back into shape again. I tied the two ends together with a cord and I put the throwing stick like this, one end against the string and then pull back—"

"You said you could hit anything you wanted to," said the wolf. "Go ahead and show us."

"What shall I hit?" asked Peter. "You pick it out and—"

Fatso pointed excitedly. "That robin, sitting in the tree."

Swiftly Peter lifted his hands, the cord came back and the shaft to which the cord was tied bent into an arc. The throwing stick whistled in the air. The robin toppled from the branch in a shower of flying feathers .He hit the ground with a soft, dull thud and lay there on his back —tiny, helpless, clenched claws pointing

at the treetops. Blood ran out of his beak to stain the leaf beneath his head.

Fatso stiffened on Peter's shoulders and the wolf was on his feet. And there was a quietness, the quietness of unstirring leaf, of floating clouds against the blue of noon.

Horror slurred Fatso's words. "You killed him! He's dead! You killed him!"

Peter protested, numb with dread. "I didn't know. I never tried to hit anything alive before. I just threw the stick at marks—"

"But you killed him. And you should never kill."

"I know," said Peter. "I know you never should. But you told me to hit him. You showed him to me. You—"

"I never meant for you to kill him," Fatso screamed. "I just thought you'd touch him up. Scare him. He was so fat and sassy—"

"I told you the stick went hard."

The Webster stood rooted to the ground.

Far and hard, he thought. *Far and hard —and fast.*

"Take it easy, pal," said the wolf's soft voice. "We know you didn't mean to. It's just among us three. We'll never say a word."

Fatso leaped from Peter's shoulder, screamed at them from the branch above. "I will," he shrieked. "I'm going to tell Jenkins."

The wolf snarled at him with a sudden, red-eyed rage. "You dirty little squealer. You lousy tattle-tale."

"I will so," yelled Fatso. "You just wait and see. I'm going to tell Jenkins."

He flickered up the tree and ran along a branch, leaped to another tree.

The wolf moved swiftly.

"Wait," said Peter, sharply.

"He can't go in the trees all the way," the wolf said, swiftly. "He'll have to come down to the ground to get across the meadow. You don't need to worry."

"No," said Peter. "No more killings. One killing is enough."

"He will tell, you know."

Peter nodded. "Yes, I'm sure he will."

"I could stop him telling."

"Someone would see you and tell on you," said Peter. "No, Lupus, I won't let you do it."

"Then you better take it on the lam," said Lupus. "I know a place where you could hide. They'd never find you, not in a thousand years."

"I couldn't get away with it," said Peter. "There are eyes watching in the woods. Too many eyes. They'd tell where I had gone. The day is gone when anyone can hide."

"I guess you're right," the wolf said slowly. "Yes, I guess you're right."

He wheeled around and stared at the fallen robin.

"What you say we get rid of the evidence?" he asked.

"The evidence—"

"Why, sure—" The wolf paced forward swiftly, lowered his head. There was a crunching sound. Lupus licked his chops and sat down, wrapped his tail around his feet.

"You and I could get along," he said. "Yes, sir, I have a feeling we could get along. We're so very much alike."

A telltale feather fluttered on his nose.

The body was a lulu.

A sledge hammer couldn't dent it and it would never rust. And it had more gadgets than you could shake a stick at.

It was Jenkins' birthday gift. The line of engraving on the chest said so very neatly:

TO JENKINS FROM THE DOGS.

But I'll never wear it, Jenkins told himself. It's too fancy for me, too fancy for a robot that's as old as I am. I'd feel out of place in a gaudy thing like that.

He rocked slowly back and forth in the rocking chair, listening to the whimper of the wind in the eaves.

They meant well. And I wouldn't hurt them for the world. I'll have to wear it once in a while just for the look of things. Just to please the Dogs. Wouldn't be right for me not to wear it when they went to so much trouble to get it made for me. But not for every day—just for my very best.

Maybe to the Webster picnic. Would want to look my very best when I go to the picnic. It's a great affair. A time when all the Websters in the world, all the Websters left alive, get together. And they want me with them. Ah, yes, they always want me with them. For I am a Webster robot. Yes, sir, always was and always will be.

He let his head sink and mumbled words that whispered in the room. Words that he and the room remembered. Words from long ago.

A rocker squeaked and the sound was one with the time-stained room. One with

the wind along the eaves and the mumble of the chimney's throat.

Fire, thought Jenkins. It's been a long time since we've had a fire. Men used to like a fire. They used to like to sit in front of it and look into it and build pictures in the flames. And dream—

But the dreams of men, said Jenkins, talking to himself—the dreams of men are gone. They've gone to Jupiter and they're buried at Geneva and they sprout again, very feebly, in the Websters of today.

The past, he said. The past is too much with me. And the past has made me useless. I have too much to remember—so much to remember that it becomes more important than the things there are to do. I'm living in the past and that is no way to live.

For Joshua says there is no past and Joshua should know. Of all the Dogs, he's the one to know. For he tried hard enough to find a past to travel in, to travel back in time and check up on the things I told him. He thinks my mind is failing and that I spin old robot tales, half-truth, half-fantasy, touched up for the telling.

He wouldn't admit it for the world, but that's what the rascal thinks. He doesn't think I know it, but I do.

He can't fool me, said Jenkins, chuckling to himself. None of them can fool me. I know them from the ground up—I know what makes them tick. I helped Bruce Webster with the first of them. I heard the first word that any of them said. And if they've forgotten, I haven't—not a look or word or gesture.

Maybe it's only natural that they should forget. They have done great things. I have let them do them with little interference, and that was for the best. That was the way Jon Webster told me it should be, on that night of long ago. That was why Jon Webster did whatever he had to do to close off the city of Geneva. For it was Jon Webster. It had to be he. It could be no one else.

He thought he was sealing off the human race to leave the earth clear for the Dogs. But he forgot one thing. Oh, yes, said Jenkins, he forgot one thing. He forgot his own son and the little band of bow and arrow faddists who had gone out that morning to play at being cavemen—and cavewomen, too.

And what they played, thought Jenkins, became a bitter fact. A fact for almost a thousand years. A fact until we found them and brought them home again. Back to the Webster House, back to where the whole thing started.

Jenkins folded his hands in his lap and bent his head and rocked slowly to and fro. The rocker creaked and the wind raced in the eaves and a window rattled. The fireplace talked with its sooty throat, talked of other days and other folks, of other winds that blew from out the west.

The past, thought Jenkins. It is a footless thing. A foolish thing when there is so much to do. So many problems that the Dogs have yet to meet.

Overpopulation, for example. That's the thing we've thought about and talked about too long. Too many rabbits because no wolf or fox may kill them. Too many deer because the mountain lions and the wolves must eat no venison. Too many skunks, too many mice, too many wildcats. Too many squirrels, too many porcupines, too many bear.

Forbid the one great check of killing and you have too many lives. Control disease and succor injury with quick-moving robot medical technicians and another check is gone.

Man took care of that, said Jenkins. Yes, men took care of that. Men killed anything that stood within their path—other men as well as animals.

Man never thought of one great animal society, never dreamed of skunk and coon and bear going down the road of life together, planning with one another, helping one another—setting aside all natural differences.

But the Dogs had. And the Dogs had done it.

Like a Br'er Rabbit story, thought Jenkins. Like the childhood fantasy of a long gone age. Like the story in the Good Book about the Lion and the Lamb lying down together. Like a Walt Disney cartoon except that the cartoon never had rung true, for it was based on the philosophy of mankind.

The door creaked open and feet were on the floor. Jenkins shifted in his chair.

"Hello, Joshua," he said. "Hello, Ichabod. Don't you please come in? I was just sitting here and thinking."

"We were passing by," said Joshua, "and we saw a light."

"I was thinking about the lights," said Jenkins, nodding soberly. "I was thinking about the night five thousand years ago. Jon Webster had come out from Geneva, the first man to come here for many hundred years. And he was upstairs in bed and all the Dogs were sleeping and

I stood there by the window looking out across the river. And there were no lights. No lights at all. Just one great sweep of darkness. And I stood there, remembering the day when there had been lights and wondering if there ever would be lights again."

"There are lights now," said Joshua, speaking very softly. "There are lights all over the world tonight. Even in the caves and dens."

"Yes, I know," said Jenkins. "It's even better than it was before."

Ichabod clumped across the floor to the shining robot body standing in the corner, reached out one hand and stroked the metal hide, almost tenderly.

"It was very nice of the Dogs," said Jenkins, "to give me the body. But they shouldn't have. With a little patching here and there, the old one's good enough."

"It was because we love you," Joshua told him. "It was the smallest thing the Dogs could do. We have tried to do other things for you, but you'd never let us do them. We wish that you would let us build you a new house, brand new, with all the latest things."

Jenkins shook his head. "It wouldn't be any use, because I couldn't live there. You see, this place is home. It has always been my home. Keep it patched up like my body and I'll be happy in it."

"But your all alone."

"No, I'm not," said Jenkins. "The house is simply crowded."

"Crowded?" asked Joshua.

"People that I used to know," said Jenkins.

"Gosh," said Ichabod, "what a body! I wish I could try it on."

"Ichabod!" yelled Joshua. "You come back here. Keep your hands off that body—"

"Let the youngster go," said Jenkins. "If he comes over here some time when I'm not busy—"

"No," said Joshua.

A branch scraped against the eave and tapped with tiny fingers along the window pane. A shingle rattled and the wind marched across the roof with tripping, dancing feet.

"I'm glad you stopped by," said Jenkins. "I want to talk to you."

He rocked back and forth and one of the rockers creaked.

"I won't last forever," Jenkins said. "Seven thousand years is longer than I had a right to expect to hang together."

"With the new body," said Joshua, "you'll be good for three times seven thousand more."

Jenkins shook his head. "It's not the body I'm thinking of. It's the brain. It's mechanical, you see. It was made well, made to last a long time, but not to last forever. Sometimes something will go wrong and the brain will quit."

The rocker creaked in the silent room.

"That will be death," said Jenkins. "That will be the end of me."

"And that's all right. That's the way it should be. For I'm no longer any use. Once there was a time when I was needed."

"We will always need you," Joshua said softly. "We couldn't get along without you."

But Jenkins went on, as if he had not heard him.

"I want to tell you about the Websters. I want to talk about them. I want you to understand."

"I will try to understand," said Joshua.

"You Dogs call them Websters and that's all right," said Jenkins. "It doesn't matter what you call them, just so you know what they are."

"Sometimes," said Joshua, "you call them men and sometimes you call them Websters. I don't understand."

"They were men," said Jenkins, "and they ruled the earth. There was one family of them that went by the name of Webster. And they were the ones who did this great thing for you."

"What great thing?"

Jenkins hitched the chair around and held it steady.

"I am forgetful," he mumbled. "I forget so easily. And I get mixed up."

"You were talking about a great thing the Websters did for us."

"Eh," said Jenkins. "Oh, so I was. So I was. You must watch them. You must care for them and watch them. Especially you must watch them."

He rocked slowly to and fro and thoughts ran in his brain, thoughts spaced off by the squeaking of the rocker.

You almost did it then, he told himself. You almost spoiled the dream.

But I remembered in time. Yes. Jon Webster, I caught myself in time. I kept faith. Jon Webster.

I did not tell Joshua that the Dogs once were pets of men, that men raised them to the place they hold today. For they must never know. They must hold up their heads. They must carry on their work. The old fireside tales are gone and they must stay gone forever.

Although I'd like to tell them. Lord knows, I'd like to tell them. Warn them against the thing they must guard against.

Tell them how we rooted out the old ideas from the cavemen we brought back from Europe. How we untaught them the many things they knew. How we left their minds blank of weapons, how we taught them love and peace.

And how we must watch against the day when they'll pick up those trends again—the old human way of thought.

"But, you said," persisted Joshua.

Jenkins waved his hand. "It was nothing, Joshua. Just an old robot's mumbling. At times my brain gets fuzzy and I say things that I don't mean. I think so much about the past—and you say there isn't any past."

Ichabod squatted on his haunches on the floor and looked up at Jenkins.

"There sure ain't none," he said. "We checked her, forty ways from Sunday, and all the factors check. They all add up. There isn't any past."

"There isn't any room," said Joshua. "You travel back along the line of time and you don't find the past, but another world, another bracket of consciousness. The earth would be the same, you see, or almost the same. Same trees, same rivers, same hills, but it wouldn't be the world we know. Because it has lived a different life, it has developed differently. The second back of us is not the second back of us at all, but another second, a totally separate sector of time. We live in the same second all the time. We move along within the bracket of that second, that tiny bit of time that has been allotted to our particular world."

"The way we keep time was to blame," said Ichabod. "It was the thing that kept us from thinking of it in the way it really was. For we thought all the time that we were passing through time when we really weren't, when we never have. We've just been moving along with time. We said, there's another second gone, there's another minute and another hour and another day, when, as a matter of fact the second or the minute or the hour was never gone. It was the same one all the time. It had just moved along and we had moved with it."

Jenkins nodded. "I see. Like driftwood on the river. Chips moving with the river. And the scene changes along the river bank, but the water is the same."

"That's roughly it," said Joshua. "Except that time is a rigid stream and the different worlds are more firmly fixed in place than the driftwood on the river."

"And the cobblies live in those other worlds?"

Joshua nodded. "I am sure they must."

"And now," said Jenkins, "I suppose you are figuring out a way to travel to those other worlds."

Joshua scratched softly at a flea.

"Sure he is," said Ichabod. "We need the space."

"But the cobblies—"

"The cobblies might not be on all the worlds," said Joshua. "There might be some empty worlds. If we can find them, we need those empty worlds. If we don't find space, we are up against it. Population pressure will bring on a wave of killing. And a wave of killing will set us back to where we started out."

"There's already killing," Jenkins told him, quietly.

Joshua wrinked his brow and laid back his ears. "Funny killing. Dead, but not eaten. No blood. As if they just fell over. It has our medical technicians half crazy. Nothing wrong. No reason that they should have died."

"But they did," said Ichabod.

Joshua hunched himself closer, lowered his voice. "I'm afraid, Jenkins. I'm afraid that—"

"There's nothing to be afraid of."

"But there is. Angus told me. Angus is afraid that one of the cobblies . . . that one of the cobblies got through."

A gust of wind sucked at the fireplace throat and gamboled in the eaves. Another gust hooted in some near, dark corner. And fear came out and marched across the roof, marched with thumping, deadened footsteps up and down the shingles.

Jenkins shivered and held himself tight and rigid against another shiver. His voice grated when he spoke.

"No one has seen a cobbly."

"You might not see a cobbly."

"No," said Jenkins. "No. You might not see one."

And that is what Man had said before. You did not see a ghost and you did not see a haunt—but you sensed that one was there. For the water tap kept dripping when you shut it tight and there were fingers scratching at the pane and the dogs would howl at something in the night and there'd be no tracks in the snow.

And there were fingers scratching on the pane.

Joshua came to his feet and stiffened, a statue of a dog, one paw lifted, lips curled back in the beginning of a snarl. Ichabod crouched, toes dug into the floor —listening, waiting.

The scratching came again.

"Open the door," Jenkins said to Ichabod. "There is something out there wanting to get in."

Ichabod moved through the hushed silence of the room. The door creaked beneath his hand. As he opened it, the squirrel came bounding in, a gray streak that leaped for Jenkins and landed in his lap.

"Why, Fatso," Jenkins said.

Joshua sat down again and his lip uncurled, slid down to hide his fangs. Ichabod wore a silly metal grin.

"I saw him do it," screamed Fatso. "I saw him kill the robin. He did it with a throwing stick. And the feathers flew. And there was blood upon the leaf."

"Quiet," said Jenkins, gently. "Take your time and tell me. You are too excited. You saw someone kill a robin."

Fatso sucked in a breath and his teeth were chattering.

"It was Peter," he said.

"Peter?"

"Peter, the Webster."

"You said he threw a stick?"

"He threw it with another stick. He had the two ends tied together with a cord and he pulled on the cord and the stick bent—"

"I know," said Jenkins. "I know."

"You know! You know all about it?"

"Yes," said Jenkins, "I know all about it. It was a bow and arrow."

And there was something in the way he said it that held the other three to silence, made the room seem big and empty and the tapping of the branch against the pane a sound from far away, a hollow, ticking voice that kept on complaining without the hope of aid.

"A bow and arrow?" Joshua finally asked. "What is a bow and arrow?"

And that was it, thought Jenkins.

What is a bow and arrow?

It is the beginning of the end. It is the winding path that grows to the roaring road of war.

It is a plaything and a weapon and a triumph in human engineering.

It is the first faint stirring of an atom bomb.

It is a symbol of a way of life.

And it's a line in a nursery rhyme.

Who killed Cock Robin?
I, said the sparrow,
With my bow and arrow,
I killed Cock Robin.

And it was a thing forgotten. And a thing relearned.

It is the thing that I've been afraid of.

He straightened in his chair, came slowly to his feet.

"Ichabod," he said, "I will need your help."

"Sure," said Ichabod. "Anything you like."

"The body," said Jenkins. "I want to wear my new body. You'll have to unseat my brain case—"

Ichabod nodded. "I know how to do it, Jenkins."

Joshua's voice had a sudden edge of fear. "What is it, Jenkins? What are you going to do?"

"I'm going to the Mutants," Jenkins said, speaking very slowly. "After all these years, I'm going to ask their help."

The shadow slithered down the hill, skirting the places where the moonlight flooded through forest openings. He glimmered in the moonlight—and he must not be seen. He must not spoil the hunting of the others that came after.

There would be others. Not in a flood, of course, but carefully controlled. A few at a time and well spread out so that the life of this wondrous world would not take alarm.

Once it did take alarm, the end would be in sight.

The shadow crouched in the darkness, low against the ground, and tested the night with twitching, high-strung nerves. He separated out the impulses that he knew, cataloguing them in his knife-sharp brain, filing them neatly away as a check against his knowledge.

And some he knew and some were mystery and others he could guess at. But there was one that held a hint of horror.

He pressed himself close against the ground and held his ugly head out straight and flat and closed his perceptions against the throbbing of the night, concentrating on the thing that was coming up the hill.

There were two of them and the two were different. A snarl rose in his mind and bubbled in his throat and his tenuous body tensed into something that was half slavering expectancy and half cringing outland terror.

He rose from the ground, still crouched, and flowed down the hill, angling to cut the path of the two who were coming up.

Jenkins was young again, young and strong and swift—swift of brain and body. Swift to stride along the wind-swept, moon-drenched hills. Swift to hear

the talking of the leaves and the sleepy chirp of birds—and more than that.

Yes, much more than that, he admitted to himself.

The body was a lulu. A sledge hammer couldn't dent it and it would never rust. But that wasn't all.

Never figured a body'd make this much difference to me. Never knew how ramshackle and worn out the old one really was. A poor job from the first, although it was the best that could be done in the days when it was made. Machinery sure is wonderful, the tricks they can make it do.

It was the robots, of course. The wild robots. The Dogs had fixed it up with them to make the body. Not very often the Dogs had much truck with the robots. Got along all right and all of that—but they got along because they let one another be, because they didn't interfere, because neither one was nosey.

There was a rabbit stirring in his den—and Jenkins knew it. A raccoon was out on a midnight prowl and Jenkins knew that, too—knew the cunning, sleek curiosity that went on within the brain behind the little eyes that stared at him from the clump of hazel brush. And off to the left, curled up beneath a tree, a bear was sleeping and dreaming as he slept—a glutton's dream of wild honey and fish scooped out of a creek, with ants licked from the underside of an upturned rock as relish for the feast.

And it was startling—but natural. As natural as lifting one's feet to walk, as natural as normal hearing was. But it wasn't hearing and it wasn't seeing. Nor yet imagining. For Jenkins knew with a cool, sure certainty about the rabbit in the den and the coon in the hazel brush and the bear who dreamed in his sleep beneath the tree.

And this, he thought, is the kind of bodies the wild robots have—for certainly if they could make one for me, they'd make them for themselves.

They have come a long ways, too, in seven thousand years, even as the Dogs have traveled far since the exodus of humans. But we paid no attention to them, for that was the way it had to be. The robots went their way and the Dogs went theirs and they did not question what one another did, had no curiosity about what one another did. While the robots were building spaceships and shooting for the stars, while they built bodies, while they worked with mathematics and mechanics, the Dogs had worked with animals, had forged a brotherhood of the things that had been wild and hunted in the days of Man—had listened to the cobblies and tried to probe the depths of time to find there was no time.

And certainly if the Dogs and robots have gone as far as this, the Mutants had gone farther still. And they will listen to me, Jenkins said, they will have to listen, for I'm bringing them a problem that falls right in their laps. Because the Mutants are men—despite their ways, they are the sons of Man. They can bear no rancor now, for the name of Man is a dust that is blowing with the wind, the sound of leaves on a summer day—and nothing more.

Besides, I haven't bothered them for seven thousand years—not that I ever bothered them. Joe was a friend of mine, or as close to a friend as a Mutant ever had. He'd talk with me when he wouldn't talk with men. They will listen to me—they will tell me what to do. And they will not laugh.

Because it's not a laughing matter. It's just a bow and arrow, but it's not a laughing matter. It might have been at one time, but history takes the laugh out of many things. If the arrow is a joke, so is the atom bomb, so is the sweep of disease-laden dust that wipes out whole cities, so is the screaming rocket that arcs and falls ten thousand miles away and kills a million people.

Although now there are no million people. A few hundred, more or less, living in the houses that the Dogs built for them because then the Dogs still knew what human beings were, still knew the connection that existed between them and looked on men as gods. Looked on men as gods and told the old tales before the fire of a winter evening and built against the day when Man might return and pat their heads and say, "Well done, thou good and faithful servant."

And that wasn't right, said Jenkins striding down the hill, that wasn't right at all. For men did not deserve that worship, did not deserve the godhood. Lord knows I loved them well enough, myself. Still love them, for that matter—but not because they are men, but because of the memory of a few of the many men.

It wasn't right that the Dogs should build for Man. For they were doing better than Man had ever done. So I wiped the memory out and a long, slow work it was. Over the long years I took away the legends and misted the memory

and now they call men Websters and think that's what they are.

I wondered if I had done right. I felt like a traitor and I spent bitter nights when the world was asleep and dark and I sat in the rocking chair and listened to the wind moaning in the eaves. For it was a thing I might not have the right to do. It was a thing the Websters might not have liked. For that was the hold they had on me, that they still have on me, that over the stretch of many thousand years I might do a thing and worry that they might not like it.

But now I know I'm right. The bow and arrow is the proof of that. Once I thought that Man might have got started on the wrong road, that somewhere in the dim, dark savagery that was his cradle and his toddling place, he might have got off on the wrong foot, might have taken the wrong turning. But I see that I was wrong. There's one road and one road alone that Man may travel—the bow and arrow road.

I tried hard enough, Lord knows I really tried.

When we rounded up the stragglers and brought them home to Webster House, I took away their weapons, not only from their hands but from their minds. I re-edited the literature that could be re-edited and I burned the rest. I taught them to read again and sing again and think again. And the books had no trace of war or weapons, no trace of hate or history, for history is hate—no battles or heroics, no trumpets.

But it was wasted time, Jenkins said to himself. I know now that it was wasted time. For a man will invent a bow and arrow, no matter what you do.

He had come down the long hill and crossed the creek that tumbled toward the river and now he was climbing again, climbing against the dark, hard uplift of the cliff-crowned hill.

There were tiny rustlings and his new body told his mind that it was mice, mice scurrying in the tunnels they had fashioned in the grass. And for a moment he caught the little happiness that went with the running, playful mice, the little, unformed, uncoagulated thoughts of happy mice.

A weasel crouched for a moment on the bole of a fallen tree and his mind was evil, evil with the thought of mice, evil with remembrance of the old days when weasels made a meal of mice. Blood hunger and fear, fear of what the Dogs might do if he killed a mouse, fear of the hundred eyes that watched against the killing that once had stalked the world.

But a man had killed. A weasel dare not kill, and a man had killed. Without intent, perhaps, without maliciousness. But he had killed. And the Canons said one must not take a life.

In the years gone by others had killed and they had been punished. And the man must be punished, too. But punishment was not enough. Punishment, alone, would not find the answer. The answer must deal not with one man alone, but with all men, with the entire race. For what one of them had done, the rest were apt to do. Not only apt to do, but bound to do—for they were men, and men had killed before and would kill again.

The Mutant castle reared black against the sky, so black that it shimmered in the moonlight. No light came from it and that was not strange at all, for no light had come from it ever. Nor, so far as anyone could know, had the door ever opened into the outside world. The Mutants had built the castles, all over the world, and had gone into them and that had been the end. The Mutants had meddled in the affairs of men, had fought a sort of chuckling war with men and when the men were gone, the Mutants had gone, too.

Jenkins came to the foot of the broad stone steps that led up to the door and halted. Head thrown back, he stared at the building that reared its height above him.

I suppose Joe is dead, he told himself. Joe was long-lived, but he was not immortal. He would not live forever. And it will seem strange to meet another Mutant and know it isn't Joe.

He started the climb, going very slowly, every nerve alert, waiting for the first sign of chuckling humor that would descend upon him.

But nothing happened.

He climbed the steps and stood before the door and looked for something to let the Mutants know that he had arrived.

But there was no bell. No buzzer. No knocker. The door was plain, with a simple latch. And that was all.

Hesitantly, he lifted his fist and knocked and knocked again, then waited. There was no answer. The door was mute and motionless.

He knocked again, louder this time. Still there was no answer.

Slowly, cautiously, he put out a hand and seized the latch, pressed down with

his thumb. The latch gave and the door swung open and Jenkins stepped inside.

"You're cracked in the brain," said Lupus. "I'd make them come and find me. I'd give them a run they would remember. I'd make it tough for them."

Peter shook his head. "Maybe that's the way you'd do it, Lupus, and maybe it would be right for you. But it would be wrong for me. Websters never run away."

"How do you know?" the wolf asked pitilessly. "You're just talking through your hair. No Webster had to run away before, and if no Webster had to run away before, how do you know they never—"

"Oh, shut up," said Peter.

They traveled in silence up the rocky path, breasting the hill.

"There's something trailing us," said Lupus.

"You're just imagining," said Peter. "What would be trailing us?"

"I don't know, but—"

"Do you smell anything?"

"Well, no."

"Did your hear anything or see anything?"

"No, I didn't, but—"

"Then nothing's following us," Peter declared, positively. "Nothing ever trails anything any more."

The moonlight filtered through the treetops, making the forest a mottled black and silver. From the river valley came the muffled sound of ducks in midnight argument. A soft breeze came blowing up the hillside, carrying with it a touch of river fog.

Peter's bowstring caught in a piece of brush and he stopped to untangle it. He dropped some of the arrows he was carrying and stooped to pick them up.

"You better figure out some other way to carry them things," Lupus growled at him. "You're all the time getting tangled up and dropping them and—"

"I've been thinking about it," Peter told him, quietly. "Maybe a bag of some sort to hang around my shoulder."

They went on up the hill.

"What are you going to do when you get to Webster House?" asked Lupus.

"I'm going to see Jenkins," Peter said. "I'm going to tell him what I've done."

"Fatso's already told him."

"But maybe he told him wrong. Maybe he didn't tell it right. Fatso was excited."

"Lame-brained, too," said Lupus.

They crossed a patch of moonlight and plunged on up the darkling path.

"I'm getting nervous," Lupus said. "I'm going to go back. This is a crazy thing you're doing. I've come part way with you, but—"

"Go back, then," said Peter, bitterly. "I'm not nervous. I'm—"

He whirled around, hair rising on his scalp.

For there was something wrong—something in the air he breathed, something in his mind—an eerie, disturbing sense of danger and much more than danger, a loathsome feeling that clawed at his shoulder blades and crawled along his back with a million prickly feet.

"Lupus!" he cried. "Lupus!"

A bush stirred violently down the trail and Peter was running, pounding down the trail. He ducked around a bush and skidded to a halt. His bow came up and with one motion he picked an arrow from his left hand, nocked it to the cord.

Lupus was stretched upon the ground, half in shade and half in moonlight. His lip was drawn back to show his fangs. One paw still faintly clawed.

Above him crouched a shape. A shape —and nothing else. A shape that spat and snarled, a stream of angry sound that screamed in Peter's brain. A tree branch moved in the wind and the moon showed through and Peter saw the outline of the face—a faint outline, like the half erased chalk lines upon a dusty board. A skull-like face with mewling mouth and slitted eyes and ears that were tufted with tentacles.

The bow cord hummed and the arrow splashed into the face—splashed into it and passed through and fell upon the ground. And the face was there, still snarling.

Another arrow nocked against the cord and back, far back, almost to the ear. An arrow driven by the snapping strength of well-seasoned straight-grained hickory—by the hate and fear and loathing of the man who pulled the cord.

The arrow spat against the chalky outlines of the face, slowed and shivered, then fell free.

Another arrow and back with the cord. Farther yet this time. Farther for more power to kill the thing that would not die when an arrow struck it. A thing that only slowed an arrow and made it shiver and then let it pass on through.

Back and back—and back. And then it happened.

The bow string broke.

For an instant, Peter stood there with the useless weapon dangling in one hand,

the useless arrow hanging from the other. Stood and stared across the little space that separated him from the shadow horror that crouched across the wolf's gray body.

And he knew no fear. No fear, even though the weapon was no more. But only flaming anger that shook him and a voice that hammered in his brain with one screaming word:

KILL—KILL—KILL.

He threw away the bow and stepped forward, hands hooked at his sides hooked into puny claws.

The shadow backed away—backed away in a sudden pool of fear that lapped against its brain—fear and horror at the flaming hatred that beat at it from the thing that walked toward it. Hatred that seized and twisted it. Fear and horror it had known before—fear and horror and disquieting resignation—but this was something new. This was a whiplash of torture that seared across its nerves, that burned across its brain.

This was hatred.

The shadow whimpered to itself—whimpered and mewed and backed away and sought with frantic fingers of thought within its muddled brain for the symbols of escape.

The room was empty—empty and old and hollow. A room that caught up the sound of the creaking door and flung it into muffled distances, then hurled it back again. A room heavy with the dust of forgetfulness, filled with the brooding silence of aimless centuries.

Jenkins stood with the door pull in his hand, stood and flung all the sharp alertness of the new machinery that was his body into the corners and the darkened alcoves. There was nothing. Nothing but the silence and the dust and darkness. Nor anything to indicate that for many years there had been anything but silence, dust and darkness. No faintest tremor of a residuary thought, no footprints on the floor, no fingermarks scrawled across the table.

An old song, an incredibly old song—a song that had been old when he had been forged, crept out of some forgotten corner of his brain. And he was surpised that it still was there, surprised that he had ever known it—and knowing it, dismayed at the swirl of centuries that it conjured up, dismayed at the remembrance of the neat white houses that had stood upon a million hills, dismayed at the thought of men who had loved their acres and walked them with the calm and quiet assurance of their ownership.

Annie doesn't live here any more.

Silly, said Jenkins to himself. Silly that some absurdity of an all-but-banished race should rise to haunt me now. Silly.

Annie doesn't live here any more.

Who killed Cock Robin? I, said the sparrow—

He closed the door behind him and walked across the room.

Dust-covered furniture stood waiting for the man who had not returned. Dust-covered tools and gadgets lay on the table tops. Dust covered the titles of the rows of books that filled the massive bookcase.

They are gone, said Jenkins, talking to himself. And no one knew the hour or the reason of their going. Nor even where they went. They slipped off in the night and told no one they were leaving. And sometimes, no doubt, they think back and chuckle—chuckle at the thought of our thinking that they still are here, chuckle at the watch we keep against their coming out.

There were other doors and Jenkins strode to one. With his hand upon the latch he told himself the futility of opening it, the futility of searching any further. If this one room was old and empty, so would be all the other rooms.

His thumb came down and the door came open and there was a blast of heat, but there was no room. There was desert—a gold and yellow desert stretching to a horizon that was dim and burnished in the heat of a great blue sun.

A green and purple thing that might have been a lizard, but wasn't, skittered like a flash across the sand, its tiny feet making the sound of eerie whistling.

Jenkins slammed the door shut, stood numbed in mind and body.

A desert. A desert and a thing that skittered. Not another room, not a hall, nor yet a porch—but a desert.

And the sun was blue—blue and blazing hot.

Slowly, cautiously, he opened the door again, at first a crack and then a little wider.

The desert still was there.

Jenkins slammed the door and leaned with his back against it, as if he needed the strength of his metal body to hold out the desert, to hold out the implication of the door and desert.

They were smart, he told himself. Smart and fast on their mental feet. Too fast and too smart for ordinary men. We never knew just how smart they were. But now I know they were smarter than we thought.

This room is just an anteroom to many other worlds, a key that reaches across unguessable space to other planets that swing around unknown suns. A way to leave this earth without ever leaving it—a way to cross the void by stepping through a door.

There were other doors and Jenkins stared at them, stared and shook his head.

Slowly he walked across the room to the entrance door. Quietly, unwilling to break the hush of the dust-filled room, he lifted the latch and let himself out and the familiar world was there. The world of moon and stars, of river fog drifting up between the hills, of treetops talking to one another across the notches of the hills.

The mice still ran along their grassy burrows with happy mouse thoughts that were scarcely thoughts. An owl sat brooding in the tree and his thoughts were murder.

So close, thought Jenkins. So close to the surface still, the old blood-hunger, the old bone-hate. But we're giving them a better start that Man had—although probably it would have made no difference what kind of a start mankind might have had.

And here it is again, the old blood-lust of man, the craving to be different and to be stronger, to impose his will by things of his devising—things that make his arm stronger than any other arm or paw, to make his teeth sink deeper than any natural fang, to reach and hurt across distances that are beyond his own arm's reach.

I thought I could get help. That is why I came here. And there is no help.

No help at all. For the Mutants were the only ones who might have helped and they have gone away.

It's up to you, Jenkins told himself, walking down the stairs. Mankind's up to you. You've got to stop them, somehow. You've got to change them somehow. You can't let them mess up the thing the Dogs are doing. You can't let them turn the world again into a bow and arrow world.

He walked through the leafy darkness of the hollow and knew the scent of moldy leaves from the autumn's harvest beneath the new green of growing things and that was something, he told himself, he'd never known before.

His old body had no sense of smell.

Smell and better vision and a sense of knowing, of knowing what a thing was thinking, to read the thoughts of raccoons, to guess the thoughts of mice, to know the murder in the brains of owls and weasels.

And something more—a faint and wind-blown hatred, an alien scream of terror.

It flicked across his brain and stopped him in his tracks, then sent him running, plunging up the hillside, not as a man might run in darkness, but as a robot runs, seeing in the dark and with the strength of metal that has no gasping lungs or panting breath.

Hatred—and there could be one hatred only that could be like that.

The sense grew deeper and sharper as he went up the path in leaping strides and his mind moaned with the fear that sat upon it—the fear of what he'd find.

He plunged around a clump of bushes and skidded to a halt.

The man was walking forward, with his hands clenched at his side and on the grass lay the broken bow. The wolf's gray body lay half in the moonlight, half in shadow and backing away from it was a shadowy thing that was half-light, half-shadow, almost seen but never surely, like a phantom creature that moves within one's dream.

"Peter!" cried Jenkins, but the words were soundless in his mouth.

For he sensed the frenzy in the brain of the half-seen creature, a frenzy of cowering terror that cut through the hatred of the man who walked forward toward the drooling, spitting blob of shadow. Cowering terror and frantic necessity—a necessity of finding, of remembering.

The man was almost on it, walking straight and upright—a man with puny body and ridiculous fists—and courage. Courage, thought Jenkins, courage to take on hell itself. Courage to go down into the pit and rip up the quaking flagstones and shout a lurid, obscene jest at the keeper of the damned.

Then the creature had it—had the thing it had been groping for, knew the thing to do. Jenkins sensed the flood of relief that flashed across its being, heard the thing, part word, part symbol, part thought, that it performed. Like a piece of mumbojumbo, like a spoken charm, like an incantation, but not entirely that. A mental exercise, a thought that took command of the body—that must be nearer to the truth.

For it worked.

The creature vanished. Vanished and was gone—gone out of the world.

There was no sign of it, no single vibration of its being. As if it had never been.

And the thing it had said, the thing that it had thought? It went like this. Like this—

Jenkins jerked himself up short. It was printed on his brain and he knew it, knew the word and thought and the right inflection—but he must not use it, he must forget about it, he must keep it hidden.

For it had worked on the cobbly. And it would work on him. He knew that it would work.

The man had swung around and now he stood limp, hands dangling at his side, staring at Jenkins.

His lips moved in the white blur of his face. "You . . . you—"

"I am Jenkins," Jenkins told him. "This is my new body."

"There was something here," said Peter.

"It was a cobbly," said Jenkins. "Joshua told me one had gotten through."

"It killed Lupus," said Peter.

Jenkins nodded. "Yes, it killed Lupus. And it killed many others. It was the thing that has been killing."

"And I killed it," said Peter. "I killed it . . . or drove it away . . . or something."

"You frightened it away," said Jenkins. "You were stronger than it was. It was afraid of you. You frightened it back to the world it came from."

"I could have killed it," Peter boasted, "but the cord broke—"

"Next time," said Jenkins, quietly, "you must make stronger cords. I will show you how it's done. And a steel tip for your arrow—"

"For my what?"

"For your arrow. The throwing stick is an arrow. The stick and cord you throw it with is called a bow. All together, it's called a bow and arrow."

Peter's shoulder sagged. "It was done before, then. I was not the first?"

Jenkins shook his head. "No, you were not the first."

Jenkins walked across the grass and laid his hand upon Peter's shoulder.

"Come home with me, Peter."

Peter shook his head. "No. I'll sit here with Lupus until the morning comes. And then I'll call in his friends and we will bury him."

He lifted his head to look into Jenkins' face. "Lupus was a friend of mine. A great friend, Jenkins."

"I know he must have been," said Jenkins. "But I'll be seeing you?"

"Oh, yes," said Peter. "I'm coming to the picnic. The Webster picnic. It's in a week or so."

"So it is," said Jenkins, speaking very slowly, thinking as he spoke. "So it is. And I will see you then."

He turned around and walked slowly up the hill.

Peter sat down beside the dead wolf, waiting for the dawn. Once or twice, he lifted his hand to brush at his cheeks.

They sat in a semicircle facing Jenkins and listened to him closely.

"Now, you must pay attention," Jenkins said. "That is most important. You must pay attention and you must think real hard and you must hang very tightly to the things you have—to the lunch baskets and the bows and arrows and the other things."

One of the girls giggled. "Is this a new game, Jenkins?"

"Yes," said Jenkins, "sort of. I guess that is what it is—a new game. And an exciting one. A most exciting one."

Someone said: "Jenkins always thinks up a new game for the Webster picnic."

"And now," said Jenkins, "you must pay attention. You must look at me and try to figure out the thing I'm thinking—"

"It's a guessing game," shrieked the giggling girl. "I love guessing games."

Jenkins made his mouth into a smile. "You're right," he said. "That's exactly what it is—a guessing game. And now if you will pay attention and look at me—"

"I want to try out these bows and arrows," said one of the men. "After this is over, we can try them out, can't we, Jenkins?"

"Yes," said Jenkins patiently, "after this is over you can try them out."

He closed his eyes and made his brain reach out for each of them, ticking them off individually, sensing the thrilled expectancy of the minds that yearned toward his, felt the little probing fingers of thought that were dabbing at his brain.

"Harder," Jenkins thought. "Harder! Harder!"

A quiver went across his mind and he brushed it away. Not hypnotism—nor yet telepathy, but the best that he could do. A drawing together, a huddling together of minds—and it was all a game.

Slowly, carefully, he brought out the hidden symbol—the words, the thought and the inflection. Easily he slid them into his brain, one by one, like one would speak to a child, trying to teach it the exact tone, the way to hold its lips, the way to move its tongue.

He let them lie there for a moment, felt the other minds touching them, felt the fingers dabbing at them. And then he thought them aloud—thought them as the cobbly had thought them.

And nothing happened. Absolutely nothing. No click within his brain. No feeling of falling. No vertigo. No sensation at all.

So he had failed. So it was over. So the game was done.

He opened his eyes and the hillside was the same. The sun still shone and the sky was robin's egg.

He sat stiffly, silently and felt them looking at him.

Everything was the same as it had been before.

Except—There was a daisy where the clump of Oswego tea had bloomed redly before. There was a pasture rose beside him and there had been none when he had closed his eyes.

"Is that all there's to it?" asked the giggly girl, plainly disappointed.

"That is all," said Jenkins.

"Now we can try out the bows and arrows?" asked one of the youths.

"Yes," said Jenkins, "but be careful. Don't point them at one another. They are dangerous. Peter will show you how."

"We'll unpack the lunch," said one of the women. "Did you bring a basket, Jenkins?"

"Yes," said Jenkins. "Esther has it. She held it when we played the game."

"That's nice," said the woman. "You surprise us ever year with the things you bring."

And you'll be surprised this year, Jenkins told himself. You'll be surprised at packages of seeds, all very neatly labeled.

For we'll need seeds, he thought to himself. Seeds to plant new gardens and to start new fields—to raise food once again. And we'll need bows and arrows to bring in some meat. And spears and hooks for fish.

Now other little things that were different began to show themselves. The way a tree leaned at the edge of the field. And a new kink in the river far below.

Jenkins sat quietly in the sun, listening to the shouts of the men and boys, trying out the bows and arrows, hearing the chatter of the women as they spread the cloth and unpacked the lunches.

I'll have to tell them soon, he told himself. I'll have to warn them to go easy on the food—not to gobble it up all at one sitting. For we will need that food to tide us over the first day or two, until we can find roots to dig and fish to catch and fruit to pick.

Yes, pretty soon I'll have to call them in and break the news to them. Tell them they're on their own. Tell them why. Tell them to go ahead and do anything they want to. For this is a brand-new world.

Warn them about the cobblies.

Although that's the least important. Man has a way with him—a very vicious way. A way of dealing with anything that stands in his path.

Jenkins sighed.

Lord help the cobblies, he said.

AGE OF UNREASON

By ALFRED COPPEL, Jr.

In all the history of Mankind, there was just one period —the Age of Unreason—where no time-traveler dared visit. The reason was quite plain, when you considered it—

"In a mass refusal to accept truth, in skepticism and suspicion of values that surpassed their power to understand, in the judgment of the variant in terms of the norm, and in militant persecution of any revolutionary scientific or moral concept . . . therein lay the madness of this strange age."

Essays on Tellurian History, Quintus Bland, Geneva Keep Press, 12.50 Cr.

MIKAL TORRES stood on a low mound and watched the Diggers at work. There was a hypnotic grace about the movements of the almost-human machines that soothed him, relaxing the harsh planes of his weathered face.

Through a curtain of shimmering heat waves, he could see the whole panorama of the dig—the machines and the men of Team One who served them. The men floating through the air in their Ingravity harnesses, and the Diggers feeding voraciously on the sandy earth, brought to mind the ancient legends of the Underworlds—of Nidhogg gnawing at the roots of Yggdrasil. The bell-mouthed intakes swung deliberately back and forth across the surfaces of the dig, and as tons of rock and soil vanished, the outlines of the buried city took shape. There was a mindless purpose to all the teeming, silent activity that was at once stirring and eerie.

Torres wiped the sweat from his forehead and smiled wryly. He was letting his imagination run away with him. The workings of an archeological team were hardly so mysterious. The city that was rising from the earth was not Valhalla or Mu. It was simply Dawn Washington. and the Diggers were not Nidhoggs, uncovering evil and tragedy to the light of the sun. They were only clever, labor-saving devices. Nor were the floating men imps and demons. They were the last few visionaries and die-hards that comprised Archeological Team One—*One* and *only*.

From the deepest part of the dig a man rose into the air and moved toward him. Torres recognized Jo Webb, his assistant. He carried a roll of papers under his arm. Torres nodded a greeting as Webb alighted beside him.

"Got something?"

Webb handed over the roll. "Found another Time Capsule down there. It was cracked by bomb concussion, but most of the stuff in it is recognizable." He grinned and added: "Our ancestors were certainly anxious that posterity know them. This is the third capsule in six months."

Torres took the papers and spoke dryly. "A combination of stupidity and conceit. Every time they became involved in a useless war, they buried capsules like crazy."

"Queer lot," agreed the younger man, "Sometimes I think I'd like to hop a Shuttle and get to see them first hand—" He caught the dark look that crossed the other's face and stopped abruptly. "I . . . I'm sorry, chief, I should have remembered how you feel about the use of Shuttles."

Torres took his pipe from his jacket, lit up, and inhaled deeply before he replied. His expression was somber.

"You misunderstand, Jo. I'm not against time travel *per se*. In fact I am quite willing to admit that it is a triumph of engineering and applied physics. It's Temporal Exploitation that I resent. If the Shuttles were placed at the disposal of competent archeologists . . . well think of the tremendous impetus it would give our work. But instead—look." He indicated the team at work in the dig. "The last team. We are anachronisms. We grub

in the dirt of ancient cities for scientific and cultural treasures that won't be there because they were stolen centuries ago by Temporal Agents that haven't even started out yet! We meet one every time we turn around. And the whole Temporal Ex program is in the hands of . . . of a bureaucrat. And a rather stupid one at that."

Jo Webb blinked at that. It was not considered good form to criticize the top men in the Institute. And Webb recalled that the present Director of Temporal Ex had married the girl Torres had once thought his fiancée. There were implications in Torres' hasty words that were more than just official.

"Loren Rhys is a fool," continued Torres dispassionately. "He knows very little of history, and even less about ordinary mass psychology. All he's well versed in is handshaking. One of these days he's going to run one of his Agents into a tight spot and it will be very unfortunate."

"I just hope it isn't Jannine, chief—" Jo Webb said earnestly.

Torres smiled bitterly. "No, Jo, Lady Rhys is too . . . handsome for that, isn't she?"

Webb reflected on the old saying about sour grapes, but he was too fond of his chief to say anything. Instead he changed the subject. Indicating the papers, he said:

"This stuff, chief, it looks like old newsprint. It was on the top deck of the capsule, so I thought I'd bring it right up. See, the date on one is readable as July 1947. I know your interest in the period, so—"

Torres sat down cross-legged on the ground and unrolled the brittle sheets. He began to work on the ancient Arabic numbers and Phoenician script. It was complicated, but Torres had plenty of experience with the characters.

Suddenly he looked up. Jo Webb was surprised to see that he was pale under his deep tan.

"What's the matter?"

Torres was on his feet, an expression of worried perplexity on his face.

"Jo. You follow the reports on Temporal Ex closely, don't you?"

"Oh, now, wait just a minute . . . I don't want you thinking that I—"

Torres made an impatient gesture. "No . . . not that. But I thought Twentieth Century Dawn Civilization was the exclusive field of Archeo. Have the Temporal Ex people got permission to make a penetration? This is important, Joe." His voice was harsh and urgent. Jo Webb could not remember ever having seen him so upset.

"Why . . . I . . . I thought you knew. Director Rhys got permission from the Commandery to try it. There was an all-points bulletin on the visor about it day before yesterday. Of course . . . the day you went up to N'york to bring down the spare Digger grids . . . you must have missed it."

"You're right—I missed it! Why wasn't I told?"

"Frankly, I thought you knew. And no one else would want the job of telling you that Temporal Ex was going to poach on us—"

"What are they after this time?" His voice was tense.

"Some document that research located here in Washington."

"A Declaration of Independence!"

"Why, yes. That was it. How did you know?"

"That Rhys!" cried Torres furiously. "That incompetent idiot! Hasn't he ever read Bland's 'History'?" He fell silent, as though still undecided about something. Then he snapped an order to his assistant. "Get out of that Ingrav and let me have it! Clear the radio and visor for a priority message and flag me the first stratojet for Geneva!"

Jo Webb nodded dumbly and lent a hand with the Ingrav harnesses fasteners. "Can you tell me what's the matter?"

"Another paradox. And this time I have to see if I can't break the chain of events." He smiled sardonically at the younger man's incomprehension. His expression showed a confidence he did not feel. "It had better be right, Jo. It concerns Jannine."

"Variable futures based on certain key events, or predestination with allowances already made for the perturbations inherent in time travel . . . which of these concepts is correct, we can but guess. The individuality of human nature might prefer the former, but most evidence seems to support the latter."

Virgil Duane, Director of Temporal Research, World Institute of Entropic Psychohistory.

Rhys read the message over again with an expression of disdain. That Torres! Embittered, passé, and a poor loser to boot. Why couldn't he stick to his digging and leave policy matters to the proper authorities? It had taken a

great deal of work to get permission from the Commandery for this next penetration—and how like Torres to make this clumsy attempt to stop it.

The very act of sending the message direct, instead of through the proper channels, showed quite clearly how little the man cared for the proper forms—and this annoyed Loren Rhys almost as much as the inferred slur on Jannine and the jealousy that could be read between the lines.

But it was just as well that Torres had written as he did. Now, at last, Rhys had something concrete to show the Commandery. Slander was a serious offense.

Techman Dugal came through the Shuttle Room door and found his chief slumped angrily behind his magnificent desk.

"Trouble?"

Rhys handed him the message, without comment. Dugal read it over and shrugged.

"Surely you aren't letting this upset you?"

Rhys' rubicund face seemed to swell. "Shouldn't I?" he demanded.

"You know Torres."

"Too well."

"Then you know that every time he runs into some irrelevant scrap of information he raises the hue and cry about Temporal Exploitation."

"Not that. Look what he says about Lady Rhys!" exclaimed the Director waving his pudgy hand angrily.

"He doesn't actually *say* anything."

"Don't split hairs!" snapped Rhys. "He as much says that she is . . . ugh . . . insane!"

"You could send someone else in on this penetration," offered the Techman tentatively.

"Certainly not! Jannine is the best Temporal Agent we have. This one is made to order for her. I don't intend to keep her out of action just because Mr. Mikal Torres says to keep her out of 1947!" He paused for breath and then added: "There is absolutely no reason why I should keep Lady Rhys out of any time sector whatever! And any inferences to the contrary I shall consider as slanderous."

Dugal shrugged. "You know best."

There wasn't much else he could say. When the subject of Jannine Rhys came up, the Director was hardly unprejudiced. After all, the woman was meat, wine, and sinecure for him. She *was* the best Agent in the Institute. Her record proved it—and the fact that she was also the Director's wife only served to give her talents wider scope. Sometimes, though, reflected Dugal, it was difficult to see how—even with Jannine's brilliance behind him—Rhys could have come so far. One thing was certain, without her he was just another balding bureaucrat. He was stubborn and not too competent. On occasion, he was even a bit stupid. Little wonder, then, that he should react so violently to anything Torres might have to say. They had been rivals for Jannine once. Now they were rivals in other things. And Torres must have been sunstruck when he sent that cryptic message. Jannine Rhys was as sound as a credit—and a lot better to look at. Torres should have known what would happen. He should have known better.

Jannine was . . . well, Jannine. Dugal licked his lips as he conjured up the picture she made in one of her favorite metal-mesh gowns. Bare backed, bare legged and thighed, and very little elsewhere—and on Jannine it looked good. But she was a great deal more than just good to look at. She was smooth, competent, and cold as crystal. She was capricious and willful—even cruel sometimes. But as an Agent, she was the best.

People outside the Institute wondered why Rhys allowed Jannine to work as a Temporal Agent. It wasn't an arrangement the average man would like—having his wife a Canterbury pilgrim one week and a Roman Vestal the next. But actually no one *allowed* Jannine Rhys to do anything. The word simply didn't apply. She had long ago decided that the Institute was the most powerful force in the world. And the men who ran it ran the rest of the planet. In other eras the world rested in the hands of soldiers, statesmen, even artists. Had she lived then, she would have married one of them. But here and now, it was the Institute personnel who led—with Temporal Ex in the van—and Jannine Rhys in the first rank of the elite. It was the only workable arrangement as far as she was concerned. So she was a Temporal Agent—and a good one.

It was she who brought back the Holy Grail, and the pictures of the destruction of Pompeii that were later made into the dominant theme of the fabulous Red Sun Symchromy, and the original manuscript of the Rubiyat, *and* the first draft of Magna Carta, and—but why go on? In a civilization of cultural pack-rats Jannine was the smartest and the best. It was Rhys' mission on earth to see to it that no one ever forgot that. No one ever did.

Rhys could not help feeling proud of himself in spite of his annoyance with Torres. The Twentieth Century of the Dawn Civilization—called the Age of Unreason by the scriveners—had not yet been tapped, and it was a repository in time for a great many cultural objects that had thus far escaped the grasping hands of the world of AD 3527. The legendary document known as "A Declaration of Independence" was one such. A prize like that would be worth a post on the Commandery. Careful research had shown that during the period AD 1849-1967 it had rested in a public building named Capitol in the barbarian city of Dawn Washington. For many centuries, the archeologists had debated the existence of the document, some offering strong arguments, that it existed only in the minds of the North American primitives. But Rhys knew where and when to look. All that remained was to loose the imperative talents of his wife on it and it would soon rest in the Institute museum. Jannine had never failed. Whether she chose to appear as a goddess or merely a visitor from the future, she came back with the goods—always.

He looked again at Torres' message and smiled scornfully. All the anger was gone out of him now.

"Dugal," he ordered somewhat pompously, "have the Shuttle ready for Lady Rhys at 1700."

"Then you aren't going to wait and see what Torres has on his mind?"

"It is plain that Torres is trying to discredit this penetration just as he has all Temporal Exploitation. It is, after all, a negation of his work as an archeologist. The Commandery and the public are with us and against him and his kind. He can't stand that. Sour grapes. Lady Rhys and I have done good work here. The record bears us out in this and I'll not stand for any interference from that one!"

The Techman nodded silently.

"1700 then," repeated Rhys unnecessarily.

"In thirty minutes," replied the Techman, and returned to the Shuttle Room.

"The human concept of randomness is questionable. I believe that there is a cosmic pattern to randomness."

Toran Long, Philosophical Mores, N'york Guild, 3.50 Cr.

Mikal Torres sat tensely on the edge of his seat as the stratojet slanted sharply upward. He motioned the stewardess away irritably as she came to offer hypnoprene. He could not waste time indulging himself in the pleasant dreams that his fellow passengers were enjoying. He would reach Geneva Keep by 2100—in time *if* Rhys had followed his instructions. A big if. Meanwhile—

There was work to do. He spread the two plastic sealed sheets before him and adjusted his portable microscanner. From his pocket pouch he extracted several volumes of microfilm and began to devour their contents.

There might have been an error of omission in his primary conclusions. He had been excited. The whole affair had the maddening inevitability of an apparent paradox. Time travel was like that. But there was something else here. Something obvious, and yet unseen. He must find the variable and change it. *If* a variable existed. Otherwise—but he did not like to think about that.

His love for Jannine was dead. There was no doubt of that. But he could not let her face the unknown without at least trying to help. And if anyone could help it was he—it could be no one else. But there were so many probability factors to integrate. He could not believe her anything but sane. Willful and cruel, yes. But a superbly integrated personality. His first guess had been a bad one—he was certain of it.

He turned to study the unwinking stars that had shown in the black sky beyond the port. An illusive phrase kept gnawing at his subconscious. Something . . . something—

The Age of Unreason!

Understanding—and cold fear. The first guess *had* been wrong. Completely, devastatingly wrong. And from somewhere came the awful conviction that in the long view he had not succeeded. If only he was in time! He glanced at his chronometer. It was 1630.

"No matter what the scientists tell us, we who understand know that man is but a puppet. The power that moves the strings is—Kismet."

Ancient Mysteries of the East, Muhammed Ali Singh, Delhi Press, 5.00 Cr.

Rhys was composing his letter of protest to the Commandery about the untoward behavior of Mikal Torres when his wife came through the outer door. As always, he stopped work just to look at her walking toward him. And as always it was a pleasure. The graceful swing of her slim hips, the round

shoulders and high breasts revealingly hidden in a spun-glass day tunic, topped by the classic face and the startlingly silver hair, sent a thrill of pleasure through him.

Rhys suspected that Jannine's beauty was the main reason for her spectacular success as an Agent. He could well imagine the rapture of the Dawn Civilization primitives when this vision of loveliness materialized out of thin air before them. Her very caprices were bowed to as to the will of a goddess. Her confidence was superb. On one penetration—into Medieval France it was—she had appeared before a simple peasant girl and exhorted her to take up arms and drive some petty prince or other out of a city that Jannine had wanted to exploit. The girl had donned man's armor and ridden forth—a saint. Rhys did not like to dwell on the possible repercussions of that kind of interference, but it had come out well. The world of 3527 had not been affected. Still it showed what Jannine could do.

An ironic footnote to the whole business was the find made by archeologists that the peasant girl had been burned at the stake for her trouble.

Nevertheless, it proved that Lady Rhys was a capable and resourceful Agent—and those were the primary attributes of a successful Agent. And this, thought the Director smilingly, was the genius that Torres wanted kept inactive! What a chance of that!

"What are you grinning about?" Even her voice was lovely.

"Read this and tell me if we haven't taken enough from our old friend Torres."

He handed her the note. Her eyes ran lightly over the angular characters:

PRIORITY MEMORANDUM TO: LOREN RHYS, DIRECTOR OF TEMPORAL EXPLOITATION DIVISION, WORLD INSTITUTE OF ENTROPIC PSYCHOHISTORY, FROM: MIKAL TORRES, FIELD DIRECTOR TEAM ONE NORTH AMERICAN ARCHEOLOGICAL DIVISION. This is important. Keep Jannine out of 1947 sector Dawn Civilization. Make immediate arrangements to have her psychoed. Have run into pertinent data that cannot be radioed, so I am bringing it in to you. Arrive Geneva Keep Skyport 2100. Meet me. I may be misinterpreting this stuff, but we cannot take a chance with Jannine. Don't let your personal antipathy toward me bollix things up. I repeat. Keep Jannine out of 1947. I cannot over-emphasize this. End message.

"Are you worried?" asked Rhys with an expansive smile.

"Should I be?" Jannine's voice was cool and perfectly modulated.

"No."

Jannine smiled and helped herself to a cigarette. Rhys lit it and she drew in a puff of perfumed smoke. "He seems to think I'm breaking up," she commented idly.

"Torres is an atavism. He's lived so long among his musty papers that he's forgotten that modern people simply don't go—insane. Furthermore, he knows that we have been ready for this penetration for weeks. There was an all-points bulletin about it. He is just trying to discredit our work here. He hates everything about it because I got you and he didn't. As far as the psycho request—"

"Do you think it necessary?" Jannine inspected her husband through heavy lidded eyes.

"Certainly not. I know you are quite capable. In fact I was just working over my letter of protest to the Commandery when you came in. What he says is slanderous, you know."

She took the paper and glanced over it. "Make it stronger," she said.

"Stronger?"

"Make him squirm. Break him. You can, you know."

Rhys nodded. There were times when his wife's intensity of feeling frightened him. To break an awkward silence he said:

"Dugal is getting ready. You start at 1700."

She rose from the desk languorously. "I know. I'll go make preparations."

Rhys watched her leave thinking exactly the same thoughts he had been thinking as she entered.

"Times Shuttles work only one way. Into the past. The future, as an unintegrated mass of space-time-individual factors remains a closed book to us. In operation, the Shuttle blows a mesotronic stasis through the 'fabric' of the continuum after places and times have been superimposed by the master integrator.

"The principle was accidentally discovered during the teleportation experiments of AD 3499, and has been in constant use since then. The Shuttle is unfortunately an inefficient machine. The load factor is small and seven hundred cubic feet of machinery are needed to move 150 pounds across time. The power requirements are astronomical

"The most important requirement in an Agent is the ability to keep hands off the alpha line of probability. The slight distor-

tion of the entropic development pattern caused by the appearance of an Agent is generally compensated for by the overall trends of Psychohistory . . . that cosmic leash first speculated upon by a Mr. Asimov of the Science Fiction school of Dawn Civilization writers. . . ."

Institute White Paper of Temporal Exploitation, Geneva Keep Press, 2.50 Cr.

At 1700, Jannine stepped onto the platform of the Shuttle and the wire-mesh curtains set in place. She was almost naked, for, as she said, sex played a very important role in the life of the Twentieth Century barbarians, and her research on the period had shown that the contemporary females used it to attain their objectives when dealing with the males.

Rhys was there, beaming as usual. The affair of the message from Torres had been put out of his mind.

Jannine said, "Lay the stasis in an inconspicuous spot for the time check. I'll go through and report back in an hour."

Dugal closed the switch and relays clucked pettishly within the Shuttle as the wires began to glow. Jannine vanished, and the Techman and the Director settled down to wait for her reappearance.

Finally, the chronometer on the wall showed 1800. Jannine. did not come back. At 1830 Rhys began to fidget. At 1840 he began to give nonsensical orders. Now Dugal was worried. The Shuttle used so much power that it could remain in operation for only two hours. After that a shutdown of two days was necessary for rewinding and readjustments in the coils. And if the Shuttle was strained past its two-hour limit—

By 1855 Rhys had to be forcibly restrained from trying to plunge through the charged netting in search of Jannine.

At 1900 Dugal shut off the power Jannine had not returned.

Rhys was wild with anxiety. He grabbed Dugal by the shoulder and spun him around. "What are you doing?" His voice was high-pitched and unnatural.

"If we keep it on any longer we'll burn it out—"

"Turn it back on!"

"I can't, sir! It won't stand the load!"

Rhys' face was contorted with fear. "Jannine may be hunting for the stasis right now! She may be in danger! Turn it on, I say!"

"It will do no good, Rhys! The machine won't take it—"

The words were cut short by Rhys' fist crashing into his mouth. The Techman dropped without a sound. Rhys clutched at the main power switch and closed it. The wire netting began to glow again. The relays chattered. Rhys stared at the empty platform helplessly.

"Where are you, Jannine? Come back! Come back, do you hear me?"

His words echoed hollowly in the small room. Then the relays gave up under the merciless overload; there was a flash of blue flame and the wire netting melted into glowing slag. There was the smell of ozone in the air, and no sound but Rhys' frightened mumbling.

"There is nothing so frightening as the concept of inevitability—"

Toran Long, Philosophical Mores, N'york Guild, 3.50 Cr.

It was a red-eyed and terrified Rhys who met Torres at the Skyport. As soon as they were in an aircar rushing toward the Institute buildings, he told Torres what had happened—haltingly, almost blubbering with the fear he felt for Jannine. He saw Torres blanch, and he rushed on with his panicky speculations.

Torres gave him a scathing look, and the Director bit his lips and did not speak again until they were alone in his luxurious office.

"What are we going to do, Mikal?" He worked his mouth nervously. "What's happened to her? *What?*"

The archeologist spoke with a cold and intense fury.

"You unutterably stupid bungler! Why do you think I sent you that message? You *fool!*"

"But I . . . I thought—"

"*You thought?* Why incompetent nincompoop, you never had a thought in your life! Now it's too late—"

There was blind panic in the other man's eyes. "What did you say? Too late—"

"The Shuttle is gone. It will take months, maybe years to rebuild! And then it will be too late." He softened suddenly before the pain in Rhys' face. Opening his pocket pouch, he brought forth two sheets of transparent plastic. Sealed inside were two tattered sheets of paper, creased and yellow with centuries of age. He laid them on the desk before Rhys.

"Rhys, when I sent you that message, I had just found these, and I thought there might be something wrong with Jannine. But on the way here I integrated the missing factors and found out a thing or two. I was wrong. Jannine didn't need

psychoing. It was something else. It was the Twentieth Century—the *Age of Unreason.*

"You see, Rhys, out of all the aeons of man's history, *that* is the only age into which temporal penetration with our methods is not feasible. Dangerous, I should say. At any time before then, a Temporal Agent could be accepted as a divine manifestation . . . a . . . a spirit . . . a nymph . . . driad . . . goddess . . . what you will. And from the Twenty-first Century on, science had advanced sufficiently for the idea of time travel to be acceptable. It was a brutish time. And of all the eras of earth's history, you and Jannine picked the very worst in which to seek your cultural knicknacks. The very worst."

"What are you trying to tell me?"

"Jannine isn't coming back, Loren," Torres said gently. "Read." He indicated the old papers.

The language was archaic and the small close lines of type seemed to dance before his eyes. He made them out with difficulty. his lips moving soundlessly.

"News Item: Washington, July 3, 1947: A scantily clad young woman was arrested today as she entered the rotunda of the Capitol building. Police have indicated to the F.B.I. that according to her own admission, she was seeking government documents. She gave her name as Jannine Rhys, although F.B.I. agents are not satisfied that it is not an alias. Police headquarters sources say that Miss Rhys is under suspicion of being an agent of a foreign power seeking A-bomb information, although her startling costume or lack—" The rest of the page was gone. Rhys felt an icy needle of fear in his vitals. He looked questioningly at Torres, but the archeologist only indicated the second sheet.

It was dated August 1949 in a styloed notation in Torres' handwriting.

". . . she will be remembered as the mysterious girl who was captured in Washington trying to steal the display copy of the Declaration of Independence from the rotunda of the Capitol building. When arrested, she was barefooted and almost completely nude. She was investigated by the F.B.I. for several months, being under suspicion of espionage. Later she was turned over to the staff of the Holyrood for treatments. In the two years she remained at Holyrood, she never once wavered in the strange delusion that she was a visitor in our time from the far future—even continuing the odd form of speech that was part of her fantasy. She was desperately unhappy at being forced to wear woolen clothes, and the staff was never able to force her to wear shoes. She remained strikingly beautiful, living her strange masquerade until her death—"

Death!

"—until her death under insulin shock therapy which was to have returned her to—"

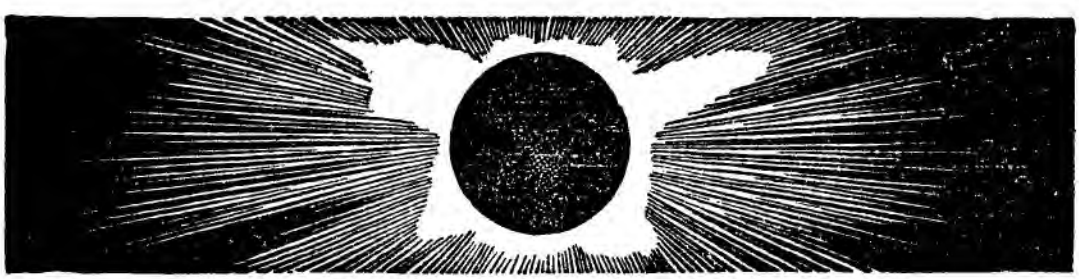
That was all.

"I found those in a Time Capsule." Torres was saying.

Rhys felt the room swaying. "This . . . this . . . place . . . this Holyrood . . . what—"

Torres nodded. He didn't want to say it, but the words came unbidden to his lips. It was cruel, but inevitable.

"A madhouse," he finished quietly.



THE BARBARIAN

By A. E. van VOGT

The Empire could handle enemies it understood. But the Barbarian was something the Child of the Gods wasn't properly prepared for—the Empire troops didn't know how to meet him—

THE only warning was a steely glinting of metal in the early morning sky.

The invaders swooped down on the city of Linn in three hundred spaceships. There must have been advance spying, for they landed in force at the gates that were heavily guarded and at the main troop barracks inside the city.

From each ship debouched two hundred odd men.

"Sixty thousand soldiers!" said Lord Advisor Tews after he had studied the reports.

He issued instructions for the defense of the palace, and sent a carrier pigeon to the three legions encamped outside the city ordering two of them to attack when ready. And then he sat pale but composed watching the spectacle from a window which overlooked the hazy vastness of Linn proper.

Everything was vague and unreal. Most of the invading ships had disappeared behind large buildings. A few lay in the open, but they looked dead. It was hard to grasp that vicious fighting was going on in their vicinity.

At nine o'clock, a messenger arrived from the Lady Lydia, Tews' aging mother:

Dear Son:

Have you any news? Who is attacking us? Is it a limited assault, or an invasion of the empire? Have you contacted Clane?

L.

The first prisoner was brought in while Tews was scowling over the unpalatable suggestion that he seek the advice of his mutation cousin. The prisoner, a bearded giant, proudly confessed that he was from Europa, one of the moons of Jupiter, and that he feared neither man nor god.

The man's size and obvious physical prowess startled Tews. But his naive outlook on life was cheering. Subsequent prisoners had similar physical and mental characteristics. And so, long before noon, Tews had a fairly clear picture of the situation.

This was a barbarian invasion from Europa. It was obviously for loot only. And, unless he acted swiftly, Linn would be divested in a few days of treasures garnered over the centuries.

Bloodthirsty commands flowed from Tews' lips. Put all prisoners to the sword. Destroy their ships, their weapons their clothing. Leave not one vestige of their presence to pollute the eternal city.

The morning ran its slow course. Tews considered making an inspection of the city escorted by the palace cavalry. But abandoned the plan when he realized it would be impossible for commanders to send him reports if he was on the move.

For the same reason he could not transfer his headquarters to a less clearly marked building.

Just before noon, the relieving report arrived that two of three camp legions were attacking in force at the main gates.

The news steadied him. He began to think in terms of broader, more basic information about what had happened. He sat somber while the court historian delivered a brief lecture on Europa.

The amazing thing to Tews was how little was known about that remote moon of Jupiter. It had been inhabited from legendary times by fiercely quarreling tribes. Its vast atmosphere was said to have been created artificially with the help of the atom gods by the scientists of the golden age. And, like all the artificial atmospheres, it contained a high proportion of the gas, teneol, which admitted sunlight, but did not allow heat to escape into space.

Starting about five years before, travelers had begun to bring out reports of a leader named Czinczar who was ruthlessly welding all the hating factions of the planet into one nation.

Czinczar. The name had a sinister

rhythm to it, a ring of leashed violence, a harsh, metallic tintin-nabulation. If such a man and his followers escaped with even a fraction of the portable wealth of Linn, the inhabited solar system would echo with the exploit. The government of Lord Adviser Tews might tumble like a house of cards.

Tews had been hesitating. There was a plan in his mind that would work better if carried out in the dead of night. But that meant giving the attackers precious extra hours for loot.

He decided not to wait, but dispatched a command to the third—still unengaged—camp legion to enter the tunnel that led into the Central Palace.

As a precaution, and with the hope of distracting the enemy leader, he sent a message to Czinczar in the care of a captured barbarian officer. In it he pointed out the foolishness of an attack that could only result in bloody reprisals on Europa itself, and suggested that there was still time for an honorable withdrawal.

There was only one thing wrong with all these schemings. Czinczar had concentrated a large force of his own for the purpose of capturing the Imperial party. And had held back in the hope that he would learn definitely whether or not the Lord Adviser was inside the palace.

The released prisoner, who delivered Tews' message, established his presence inside.

The attack in force that followed captured the Central Palace and everyone in it, and surprised the legionnaires who were beginning to emerge from the secret passageway. Czinczar's men poured all the oil in the large palace tanks into the downward sloping passageway, and set it afire.

Thus died an entire legion of men.

That night a hundred reserve barbarian spaceships landed behind the Linnan soldiers besieging the gates. And in the morning, when the barbarians inside the city launched an attack, the two remaining legions were cut to pieces.

Of these events the Lord Adviser Tews knew nothing. His skull had been turned over the previous day to Czinczar's favorite goldsmith, to be plated with Linnan gold, and shaped into a goblet to celebrate the greatest victory of the century.

To Lord Clane Linn, going over his accounts on his country estate, the news of the fall of Linn came as a special shock.

With unimportant exceptions, all his atomic material was in Linn.

He dismissed the messenger, who had rashly shouted the news as he entered the door of the accounting department. And then sat at his desk—and realized that he had better accept for the time being the figures of his slave bookkeepers on the condition of the estate.

As he glanced around the room after announcing the postponement, it seemed to him that at least one of the slaves showed visible relief.

He did not delay, but called the man before him instantly. He had an inexorable system in dealing with slaves, a system inherited from his long dead mentor, Joaquin, along with the estate itself. Integrity, hard work, loyalty, and a positive attitude produced better conditions, shorter working hours, more freedom of action, after thirty the right to marry, after forty legal freedom.

Laziness and other negative attitudes such as cheating were punished by a set pattern of demotions.

Clane could not even imagine a better system. And now, in spite of his personal anxieties, he carried out the precept of Joaquin as it applied to a situation where no immediate evidence was available. He told the man, Oorag, what had aroused his suspicions, and asked him if they were justified.

"If you are guilty and confess," he said, "you will receive only one demotion. If you do not confess and you are later proven guilty, there will be three demotions, which means physical labor, as you know."

The slave, a big man, shrugged, and said with a sneer:

"By the time Czinczar is finished with you Linnans, you will be working for me."

"Field labor," said Clane curtly, "for three months, ten hours a day."

He was astonished. Again and again, he had noticed this self-destructive instinct in people. Men and women in the highest and lowest walks of life yielded to the instinct to say something devastating for the sake of a momentary defiance or thrill of superiority.

As the slave was led out by guards, he shouted a final insult over his shoulder:

"You wretched mutation, you'll be where you belong when Czinczar gets here."

Clane forbore an answer. He considered it doubtful that the new conqueror had been selected by fate to punish all

the evildoers of Linn according to their deserts. It would take too long. He put the thought out of his mind, and walked to the doorway. There he paused, and faced the dozen trusted slaves who sat at their various desks.

"Do nothing rash," he said slowly in a clear voice, "any of you. If you harbor emotions similar to those expressed by Oorag, restrain yourselves. The fall of one city in a surprise attack is meaningless."

He hesitated. He was, he realized, appealing to their cautious instincts, but his reason told him that in a great crisis men did not always consider all the potentialities.

"I am aware," he said finally, "there is no great pleasure in being a slave, though it has advantages—economic security, free craft training. But Oorag's wild words are a proof that, if young slaves were free to do as they pleased, they would constitute a jarring if not revolutionary factor in the community. It is unfortunately true that people of different races can only gradually learn to live together."

He went out, dissatisfied with his argument, but unable to see the flaw in it, if there was one.

He had no doubt whatsoever that here in this defiance of Oorag, the whole problem of a slave empire had shown itself in miniature. If Czinczar were to conquer any important portion of Earth, a slave uprising would follow automatically.

There were too many slaves, far too many for safety, in the Linnan empire.

Outside, he saw his first refugees. They were coming down near the main granaries in a variety of colorful sky-scooters.

Clane watched them for a moment, trying to picture their departure from Linn. The amazing thing was that they had waited till the forenoon of the second day. People must simply have refused to believe that the city was in danger, though, of course, early fugitives could have fled in different directions. And so not come near the estate.

Clane emerged decisively out of his reverie. He called a slave, and dispatched him to the scene of the arrivals with a command to his personal guards:

"Tell these people who have rapid transportation to keep moving. Here, eighty miles from Linn, we shall take care only of the footweary."

Briskly now, he went into his official residence, and called the commanding officer of his troops.

"I want volunteers," he explained, "particularly men with strong religious beliefs, who on this second night after the invasion are prepared to fly into Linn and remove all the transportable equipment from my laboratory."

His plan, as he outlined it finally to some forty volunteers, was simplicity itself. In the confusion of taking over a vast city, it would probably be several days before the barbarian army would actually occupy all the important residences. Particularly, on these early days, they might miss a house situated, as was his, behind a barrier of trees.

If by some unfortunate chance it was already occupied, it would probably be so loosely held that bold men could easily kill every alien on the premises, and so accomplish their purpose.

Clane hoped so, violently.

"I want to impress upon you," he said, "the importance of this task. As all of you know, I am a member of the temple hierarchy. I have been intrusted with sacred god metals and sacred equipment, including material taken from the very homes of the gods.

"It would be a disaster if these precious relics were to fall into unclean hands. I, therefore, charge you that, if you should by some mischance be captured, do not reveal the real purpose of your presence. Say that you came to rescue your owner's private property. Even admit that you were very foolish to sacrifice yourself for such a reason."

Clane finished: "And finally," he said, "no matter what time of the night you return, I wish to be awakened immediately."

When they had gone out to prepare for the mission, Clane dispatched one of his private spaceships to the nearby city of Goram, and asked the commander there, a friend of his, what kind of counteraction was being prepared against the invader.

"Are the authorities in the cities and towns," he asked, "showing that they understand the patterns of action required of them in a major emergency? Or must the old law be explained to them from the beginning?"

The answer arrived in the shortest possible time, something under forty minutes. The general placed his forces at Clane's command, and advised that he had dispatched messengers to every major city on earth, in the name of "his excellency,

Lord Clane Linn, ranking survivor on Earth of the noble Tews, the late Lord Adviser, who perished at the head of his troops, defending the city of Linn from the foul and murderous surprise attack launched by a barbarian horde of beast-like men, who seek to destroy the fairest civilization that has ever existed."

There was more in the same vein, but it was not the excess of verbiage that startled Clane. It was the offer itself, and the implications. *In his name,* an army was being organized.

He had from childhood taken it for granted that soldiers regarded mutations as bad luck. Even the presence of a mutation on a field, it was said, could demoralize entire legions.

After rereading the message, he walked slowly to the full length mirror in the adjoining bathroom, and stared at his image.

He was dressed in the fairly presentable reading gown of a temple scientist. Like all his temple clothing, the cloth folds of this concealed his "differences" from casual view. An observer would have to be very acute to see how carefully the cloak was drawn around his neck, and how tightly the arm ends were tied together at his wrists.

It would take three months to advise Lord Jerrin on Venus, and four to reach Lord Draid on Mars, both planets being near the far side of the Sun from Earth. It would require almost, though not quite, twice as long to receive back a message from them.

Only a member of the ruling family could possibly win the support of the diversified elements of the empire. Of the Lord Adviser's immediate family, there was the venerable Lady Lydia—too old; and there was Lord Clane, younger brother of Jerrin, grandson of the late Lord Leader.

For not less than six months accordingly he could be the legitimate Lord Leader of Linn.

The afternoon of that second day of the invasion waned slowly. Great ships began to arrive, bringing soldiers. By dusk, more than a thousand men were encamped along the road to the city Linn, and by the riverside. Darting small craft and wary full-sized spaceships floated overhead, and foot patrols were out, guarding all the approaches to the estate.

The roads themselves were virtually deserted. It was too soon for the mobs from Linn, which air-scooter scouts reported were fleeing the captured city by the gates that, at mid-afternoon, were still open.

During the last hour before dark, the air patrols reported that the gates were being shut one by one. And that the stream of refugees was dwindling to a trickle near the darkening city.

All through that last hour, the sky was free of scooters transporting refugees.

It was clear that the people who could afford the costly machines were either already safe, or had waited too long, possibly in the hope of succoring some absent member of the family.

At midnight, the volunteers departed on their dangerous mission in ten scooters and one spaceship. As a first gesture of his new authority, Clane augmented their forces by adding a hundred soldiers from the regular army.

He watched the shadowy ships depart, then hurried to attend a meeting of those general officers who had had time to arrive. A dozen men climbed to their feet as he entered. They saluted, then stood at attention.

Clane stopped short. He had intended to be calm, matter-of-fact, pretend even to himself that what was happening was natural.

The feeling wasn't like that. An emotion came, familiar but terrifying. He could feel it tangling up the remoter reflexes of his nervous system as of old, the beginning of the dangerous childish panic, product of his early, horrible days as a tormented mutation.

The muscles of his face worked. Three times he swallowed hard. Then, with a stiff gesture, he returned the salute. And, walking hastily to the head of the table, sat down.

The acting Lord Leader of Linn was in conference with his general staff.

Clane waited till they had seated themselves, then asked for brief reports as to available troops. He noted down the figures given by each man for his province, and at the end added up the columns.

"With four provinces still to be heard from," he announced, "we have a total of eighteen thousand trained soldiers, six thousand partly trained reserves, and some five hundred thousand able-bodied civilians. The—"

He stopped. The confidence went out of him. "Is that all?" he asked sharply.

"Your excellency," said his friend, Morkid, "the Linnan empire maintains

normally a standing army of one million men. On Earth by far the greatest forces were stationed in or near the city of Linn, and they have been annihilated. Some four hundred thousand men are still on Venus, and slightly more than two hundred thousand on Mars.

Clane, who had been mentally adding up the figures given, said quickly:

"That doesn't add up to a million men."

Morkid nodded, gravely. "For the first time in years, the army is understrength. The conquest of Venus seemed to eliminate all potential enemies of Linn, and Lord Adviser Tews considered it a good time to economize."

"I see," said Clane.

He felt pale and bloodless, like a man who has suddenly discovered that he cannot walk by himself.

Lydia climbed heavily out of her sedan chair, conscious of how old and unattractive she must seem to the grinning barbarians in the courtyard. She didn't let it worry her too much. She had been old a long time now, and her image in a mirror no longer shocked her. The important thing was that her request for an interview had been granted by Czinczar after she had, at his insistence, withdrawn the proviso that she be given a safe conduct.

The old woman smiled mirthlessly. She no longer valued highly the combination of skin and bones that was her body. But there was exhilaration to the realization that she was probably going to her death. Despite her age, and some self-disgust, she felt reluctant to accept oblivion. But Clane had asked her to take the risk.

It vaguely amazed Lydia that the idea of the mutation holding the Lord Leadership did not dismay her any more. She had her own private reasons for believing Clane capable.

She walked slowly along the familiar hallways, through the gleaming archways and across rooms that glittered with the treasure of the Linn family. Everywhere were the big, bearded young men who had come from far Europa to conquer an empire about which they could only have heard by hearsay. Looking at them, she felt justified in all the pitiless actions she had taken in her day. They were, it seemed to the grim old woman, living personifications of the chaos that she had fought against all her life.

As she entered the throne room, the darker thoughts faded from her mind. She glanced around with sharp eyes for the mysterious leader.

There was no one on or near the throne.

Groups of men stood around talking. In one of the groups was a tall, graceful, young man, different from all the others in the room. They were bearded. He was clean shaven.

He saw her, and stopped listening to what one of his companions was saying, stopped so noticeably that a silence fell on the group.

The silence communicated itself to other groups. After not more than a minute, the roomful of men had faced about and was staring at her, waiting for their commander to speak.

Lydia waited also, examining him swiftly. Czinczar was not a handsome man, but he had an appearance of strength, always a form of good looks.

And yet, it was not enough. This barbarian world was full of strong-looking men. Lydia, who had expected outstanding qualities, was puzzled.

His face was rather sensitive than brutal, which was unusual. But still not enough to account for the fact that he was absolute lord of an enormous undisciplined horde.

The great man came forward. "Lady," he said, "you have asked to see me."

And then she knew his power. In all her long life, she had never heard a baritone voice so resonant, so wonderfully beautiful, so assured of command.

It changed him. She realized suddenly that she had been mistaken about his looks. She had sought normal clean-cut handsomeness.

This man was beautiful.

The first fear came to her. A voice like that, a personality . . . like that.

She had a vision of this man persuading the Linnan empire to do his will. Mobs hypnotized. The greatest men bewitched.

She broke the spell with an effort of will. She said:

"You are Czinczar?"

"I am Czinczar."

The definite identification gave Lydia another though briefer, pause. But this time she recovered more swiftly. And this time, too, her recovery was complete.

Her eyes narrowed. She stared at the great man with a developing hostility.

"I can see," she said acridly, "that my purpose in coming to see you is going to fail."

"Naturally." Czinczar inclined his head, shrugged.

He did not ask her what was her pur-

pose. He seemed incurious. He stood politely, waiting for her to finish what she had to say.

"Until I saw you," said Lydia grimly, "I took it for granted that you were an astute general. Now, I see that you consider yourself a man of destiny. I can already see you being lowered into your grave."

There was an angry murmur from the other men in the room. Czinczar waved them into silence.

"Madam," he said, "such remarks are offensive to my officers. State your case, and then I will decide what to do with you."

Lydia nodded, but she noted that he did not say that he was offended. She sighed inwardly. She had her mental picture now of this man, and it depressed her. All through known history these natural leaders had been spewed up by the inarticulate masses. They had a will in them to rule or die. But the fact that they frequently died young made no great difference. Their impact on their times was colossal.

Such a man could, even in his death throes, drag long established dynasties with him.

Already, he had killed the legal ruler of Linn, and struck a staggering blow at the heart of the empire. By a military freak, it was true—but history accepted such accidents without a qualm.

Lydia said quietly, "I shall be brief, since you are no doubt planning high policy and further military campaigns. I have come here at the request of my grandson, Lord Clane Linn."

"The mutation!" Czinczar nodded. His remark was noncommittal, an identification not a comment.

Lydia felt an inward shock that Czinczar's knowledge of the ruling faction should extend to Clane, who had tried to keep himself in the background of Linnan life.

She dared not paused to consider the potentialities. She went on quietly:

"Lord Clane is a temple scientist, and, as such, he has for many years been engaged in humanitarian scientific experiments. Most of his equipment, unfortunately, is here in Linn."

Lydia shrugged. "It is quite valueless to you and your men, but it would be a great loss to civilization if it was destroyed or casually removed. Lord Clane therefore requests that you permit him to send slaves to his town house to remove these scientific instruments to his country estate. In return—"

"Yes," echoed Czinczar, "in return—"

His tone was ever so faintly derisive; and Lydia had a sudden realization that he was playing with her. It was not a possibility that she could pay any attention to.

"In return," she said, "he will pay you in precious metals and jewels any reasonable price which you care to name."

Having finished, she took a deep breath. And waited.

There was a thoughtful expression on the barbarian leader's face.

"I have heard," he said, "of Lord Clane's experiments with the so-called" —he hesitated—"god metals of Linn. Very curious stories, some of them; and as soon as I am free from my military duties I intend to examine this laboratory with my own eyes.

"You may tell your grandson," he went on with a tone of finality, "that his little scheme to retrieve the greatest treasures in the entire Linnan empire was hopeless from the beginning. Five spaceships descended in the first few minutes of the attack on the estate of Lord Clane, to ensure that the mysterious weapons there were not used against my invading fleet, and I consider it a great misfortune that he himself was absent in the country at the time.

"You may tell him that we were not caught by surprise by his midnight attempt two days ago to remove the equipment, and that his worst fears as to its fate are justified."

He finished, "It is a great relief to know that most of his equipment is safely in our hands."

Lydia said nothing. The phrase, "You may tell him," had had a profound chemical effect on her body. She hadn't realized she was so tense. It seemed to her that, if she spoke, she would reveal her own tremendous personal relief.

"You may tell him—" There could be only one interpretation. She was going to be allowed to depart.

Once more she waited.

Czinczar walked forward until he was standing directly in front of her. Something of his barbarous origin, so carefully suppressed until now, came into his manner. A hint of sneer, the contempt of a physically strong man for decadence, a feeling of genuine basic superiority to the refinement that was in Lydia. When he spoke, he showed that he was consciously aware that he was granting mercy:

"Old woman," he said, "I am letting

you go because you did me a great favor a few years ago, when you maneuvered your son, Lord Tews, into the, what did he call it, Lord Advisership. That move, and that alone, gave me the chance I needed to make my attack on the vast Linnan empire."

He smiled. "You may depart, bearing that thought in mind."

Long ago, Lydia had condemned the sentimental action that had brought Tews into supreme power. But it was a different matter to realize that, far out in interplanetary space, a man had analyzed the move as a major Linnan disaster.

She went out without another word.

Czinczar slowly climbed the hill leading up to the low, ugly fence that fronted Lord Clane's town house. He paused at the fence, recognized the temple building material of which it was composed —and then walked on thoughtfully.

With the same narrow-eyed interest a few minutes later, he stared at the gushing fountain of boiling water.

He beckoned finally the engineer who had directed the construction of the spaceships that had brought his army to Earth.

"How does it work?"

The designer examined the base of the fountain. He was in no hurry, a big, fattish man with a reputation for telling jokes so coarse that strong men winced with shame. He had already set up house in one of the great palaces with three Linnan girls as mistresses and a hundred Linnan men and women as slaves. He was a happy man, with little personal conceit and very little pride as yet to restrain his movements.

He located the opening into the fountain, and knelt in the dirt like any worker. In that, however, he was not unique. Czinczar knelt beside him, little realizing how his actions shocked the high born Linnans who belonged to his personal slave retinue.

The two men peered into the gloom.

"Temple building material," said Meewan, the designer.

Czinczar nodded. They climbed to their feet without further comment, for these were matters which they had discussed at length over a period of several years.

At the house, a few minutes later, the leader and his henchman both lifted the heavy draperies that covered the walls of a corridor leading into the main laboratory. Like the fence outside, the walls were warm as from some inner heat.

Temple building material! Once again, there was no comment passed between them. They walked on into the laboratory proper; and now they looked at each other in amazement.

The room had been noticeably enlarged from its original size. A great section had been torn out of one wall, and the gap, although it was completely filled in, was still rough and unfinished.

But that was only the environment. On almost every square yard of the vast new floor were machines opaque and machines transparent, machines big and small, some apparently complete, others unmistakably mere fragments.

For a moment there was a distinct sense of too much to see. Czinczar walked forward speculatively, glancing at several of the transparent articles with an eye that tried to skim the essentials of shape and inner design.

At no time, during those first moments, did he have any intention of pausing for a detailed examination.

And then, out of the corner of his eye, he caught a movement.

A glow. He bent down, and peered into a long partly transparent metal case, roughly shaped like a coffin, even as to the colorful and costly looking lining. The inside, however, curved down to form a narrow channel.

Along this channel rolled a ball of light.

It turned over sedately, taking approximately one minute to cover the distance to the far side. With the same lack of haste, it paused, seemed to meditate on its next action, and then, with immense deliberation began its return journey.

The very meaninglessness of the movement fascinated Czinczar. He extended his hand gingerly to within an inch of the ball. Nothing happened. He drew back, and pursed his lips. In spite of his attack on Linn, he was not a man who took risks.

He beckoned towards a guard. "Bring a slave," he said.

Under his direction a former Linnan nobleman, perspiring from every pore, extended his finger and touched the moving ball.

His finger went in as if there was nothing there.

He drew back, startled. But the inexorable Czinczar was not through with him. Once more the reluctant, though no longer quite so fearful, finger penetrated the moving ball.

The ball rolled into it, through it, beyond it.

Czinczar motioned the slave aside and stood looking at him thoughtfully. There must have been something of his purpose in his face, for the man gave forth a low cry of horror:

"Master, I understand nothing of what I have seen. Nothing. Nothing."

"Kill him!" said Czinczar.

He turned, scowling, back to the machine. "There must be," he said, and there was a stubborn note in his glorious voice, "some reason for its movements, for—its existence."

Half an hour later, he was still examining it.

There was an old saying in the Linnan army to the effect that, during his first month, a trainee, if put into battle, caused the death of his trained companions. During the second month, he hindered retreats made necessary by his presence. And during the third month he was just good enough to get himself killed in the first engagement.

Clane, watching a group of trainees after several weeks of drilling, experienced all the agony of realizing how true the adage was.

Learning to fire a bow effectively required complex integration of mind and body. Infighting with swords had to include the capacity for co-operating with companions. And effective spear fighting was an art in itself.

The plan he outlined that night to the full general staff was an attempt to cover up against the weakness. It was a frank determination to use unfit men as first-line defense troops.

He put in a word for the unfit: "Do not overexercise them. Get them out into the open air, and simply teach them the first elements of how to use weapons. First bows and arrows, then spears, and finally swords."

He paused, and, looking around the table, mentally measured the ability of the audience to assess his next statement. He said slowly:

"If two months from now our position is as desperate as I anticipate, there is one other possibility which I will then explore. It has to do with one of several machines of the gods which I removed last year from a pit of the gods, and which Czinczar captured when he effectively occupied my town. But nothing can be done for two months."

After the meeting, long into the night, he examined reports on the cities of Nouris and Gulf, which had fallen virtually without a fight. As the barbarians attacked, the slaves simply rose up and murdered their masters. A supplementary general staff report recommended mass execution for all able-bodied slaves.

The uneasy Clane took that problem to bed with him.

FREEDOM FOR LOYAL SERVANTS.

By order of his excellency, the acting Lord Leader of Linn, temple scientist, beloved of the Atomic Gods themselves, it is hereby commanded, and so it shall be forevermore:

GREETINGS to all those good men and women who have quietly and efficiently served the empire in atonement for sins of leaders who rashly led them into hopeless wars against the god-protected Linnan empire—here is the chance for complete freedom which you have earned by your actions and attitudes during past years.

The empire has been attacked by a cruel and barbarous invader. His reign of terror cannot but be temporary, for invincible forces are gathering against him. An army of a million men is on the way from Mars and Venus, and here on Earth irresistible forces totaling more than two million men are already organizing for battle.

The enemy himself numbers less than sixty thousand soldiers. To this small army, which gained its initial victory by a surprise and base attack, a few foolish men and women have rashly attached themselves. All the women unless they are convicted of major crimes, will be spared. For the men who have already gone over to the enemy, there is but one hope: Escape immediately from the barbarian enemy, and REPORT TO THE CONCENTRATION CAMPS listed at the bottom of this proclamation. There will be no guards at the camps, but weekly roll calls will be made. And every man whose name appears regularly on these rolls will be granted full freedom when the enemy is defeated.

For hardened recalcitrants, the penalty is death.

To those men and women still loyally serving at their appointed tasks, I, Lord Clane, acting Lord Leader of Linn, give the following commands:

All women and children will remain at their present residences, continuing to serve as in the past.

All men report to their masters, and say, "It is my intention to take advantage of the offer of Lord Clane. Give me a week's food, so that I, too, may report to a concentration camp."

Having done this, and having received the food, leave at once. DO NOT DELAY A SINGLE HOUR.

If for some reason your master is not at home, take the food and go without

permission. No one will hinder you in your departure from the city.

Any man to whom this order applies, who is found lurking within any city or town twenty-four hours after this proclamation is posted, will be suspected of treasonable intent.

The penalty is death.

Any man, who after one week, is found within a fifty-mile radius of a city, will be suspected of treasonable intent.

The penalty is death.

To save yourself, go to a concentration camp, and appear regularly for roll call. If the barbarians attack your camp, scatter into the forests and hills and hide, or go to another camp.

Adequate food rations will be supplied all camps.

All those of proven loyalty will receive freedom when the war is over. They will immediately have the right to marry. Settlement land will be opened up. After five years, citizenship rights, granted alien immigrants, will be available on application.

After three years, new citizens may own unpaid servants.

BE WISE—BE SAFE—BE FREE.

It was a document that had its weak points. But Clane spent most of one day arguing its merits to a group of doubtful officers. He pointed out that it would be impossible to keep secret a general order for mass execution. A majority of the slaves would escape, and then they would really be dangerous.

He admitted the proclamation was full of lies. A million slaves in Linn alone had gone over to Czinczar, many of them highly trained soldiers. Czinczar could use them to garrison any city he might capture, and thus have his own army free for battle. It was Morkid, sardonic and scathing, who ended the argument late in the afternoon.

"Gentlemen," he said, "you do not seem to be aware that our commander-in-chief, the acting Lord Leader of Linn, has at one stroke cut through all our illusions and false hopes, and penetrated straight to the roots of the situation in which we find ourselves. What is clear by the very nature of our discussion is that we have no choice."

His voice went up: "In this period when disaster is so imminent, we are fortunate in having as our leader a genius of the first rank, who has already set us on the only military path that can lead to victory.

"Gentlemen"—his voice rang with the tribute—"I give you Lord Clane Linn, acting Lord Leader of Linn."

The clapping lasted for five minutes.

Clane watched the battle for Goram from a patrol craft, that darted from strong point to strong point. Enemy squadrons tried again and again to close in on him, but his own machine was faster and more maneuverable.

The familiar trick of getting above him was tried, an old device in patrol craft and spaceship fighting. But the expected energy flow upward did not take place. His small vessel did not even sag, which was normally the minimum reaction when two sources of atomic energy operated in a gravity line.

The efforts worried Clane. Czinczar was, of course, aware by this time that his enemy knew more about the metals of the gods than he or his technicians. But it would be unfortunate if they should conclude from the actions of this one craft that Clare himself was inside.

He wanted to see this battle.

In spite of everything, minute by minute, he saw it.

The defense was tough, tougher than he had anticipated from the fact that four more cities had fallen in the past four weeks.

The unfit were fighting grimly for their lives. Arrows took a toll of the attackers. Spears, awkwardly but desperately manipulated, inflicted wounds and sometimes death.

The sword fighting stage was the worst. The muscular and powerful barbarians, once they penetrated the weapons that could attack them from a distance, made short work of their weaker adversaries.

The first line was down, devastated, defeated. The second line battle began. Barbarian reserves came forward, and were met by waves of arrows that darkened the sky—and took their toll when they struck the advancing groups of men.

Hoarse cries of pain, curses, the shrieks of the desperately wounded, the agonized horror of Linnans suddenly cut off, and doomed rose up to the ears of those in the darting small craft.

The defenders strove to stay together. That was a part of their instructions. Retreat slowly to the central squares—which were strongly held against a surprise rear attack. Retreat, and at the last minute spaceships would land and rescue the hard pressed, but theoretically still intact army of what had once been able-bodied civilians.

After a month and a half of training, they were too valuable to sacrifice in a last ditch fight.

As it was, their dogged resistance was shaping the pattern of the war. Surely, Czinczar, counting his men after each battle, must already be having his own private doubts. His army as a whole, augmented by the unrepentant among the slaves, was increasing daily. But the larger the army grew the smaller was his chance of controlling it.

But there was no doubt about this battle, or this city. As the dark tide of night slipped in from the east, victory fires began to burn in all the important street. The smoke wreathed into the sky and blood-red flames licked up into the blackness.

The Linnans below, at this very moment enduring the beginning of a barbarian occupation, would not be in a humor to appreciate that their grudgingly accepted defeat represented a possible turning point in the war.

The time had come to decide when and where and under what conditions the main Linnan force would be thrown into a decisive battle for the control of the planet.

And there was another decision, too, involving an immensely risky attempt to get near a certain atomic machine. Clane shifted uneasily in his seat, and drew his cloak more tightly around his shoulders.

He had no illusions about what one easily killable man could do even with phenomenal weapons. Besides, he had received a disturbing note from Czinczar, which contained only one sentence, a question:

"Have you ever wondered, my Lord Clane, how the civilization of the golden age was so *completely* destroyed?"

It was a problem about which the mutation, Clane, had pondered many times.

But it had never occurred to him that the answer might be known to a barbarian from a remote moon of Jupiter.

The moment the news arrived, Czinczar headed for Linn. He was met on the roof of the central palace by Meewan. The big man had a smile on his plump, good-fellow face.

"Your theory was right," he said admiringly. "You thought he would take a chance at the critical period of the invasion. And he arrived this morning."

"Tell me exactly how you accepted his services."

The golden voice spoke softly. The strange face was thoughtful as the other man gave his detailed account. There seemed no end to his interest. When the story was finished, he asked question after question. Each answer seemed merely to stimulate new questions. Meewan said finally, queruously:

"Your excellency, what are you doubtful about?"

That stopped him, for he had not realized how tense he was. After all, he told himself, the situation was simple enough. He had issued an open invitation for temple scientists to come and take care of "some god metal relics" which had fallen into possession of the conquerors. It was a cleverly worded request, designed to win general approval from the defeated even as it drew *the* temple scientist to his own undoing.

Its only stipulation, very guardedly worded, was that in return for the privilege of sharing the "safeguarding of the relics," experiments should be continued as if no war was being waged.

"The gods," Czinczar had said sanctimoniously in the invitation, "are above the petty quarrels of mankind."

Apparently, at least one of its purposes was accomplished. The mutation himself had applied for the job. Czinczar meditated cautiously on tactics.

"Bring him here," he said finally. "We can't take any risks of his having established control over anything at his house. We know too little and he too much."

While he waited, he examined the rod of force—which was one of the few workable instruments that had been found in the house. He was not a man who accepted past truths as final. The fact that it had worked a week ago did not mean that it would work now.

He tested it from a great window, pointing it at the upper foliage of a nearby tree.

No sound, no visible light spewed forth —but the upper section of the tree crashed down onto a pathway below.

Czinczar experienced the satisfaction of a logical man whose logic had proved correct. It was not an uncommon satisfaction. From the early days when he had been a back country transcriber of messages to the days of his rise to power, he had taken risks which seemed necessary, no more, no less.

Even now he could not be sure that the atomic wizard, Lord Clane, would not defeat him by some decisive wile. For several minutes, he pondered that, and then ordered a box brought in from the ice room of the palace. The contents of the box had come all the way from Europa packed in ice.

He was indicating to the slaves where

to place the box when an officer burst breathlessly into the throne room.

"Excellency," he cried. "Hundreds of spaceships. It's an attack."

Standing at the window a moment later, watching the ships settling down, Czinczar realized that his hazy suspicions had been correct.

The appearance of Clane in the city was part of a planned maneuver, which would now run its deadly course.

It was a pleasure to know that Lord Clane himself was caught in a trap.

Czinczar wasted no time watching a battle which he could not hope to see from the palace in any important detail. Nor did he have the feeling Tews had had months earlier, that it was necessary for commanders to know where he was in the early stages of the engagement.

It was nice for a general to get reports, and there was a thrill in giving a "Stand fast" order to troops already fighting for their lives. But it was quite unnecessary.

Czinczar issued quick instructions about the box, and wrote a note for Meewan. Then he rode with a strong escort to the headquarters of the reserve army in the middle of the city.

The reserve contained a barbarian core, but, like the main defense forces of the city, it was overwhelmingly made up of slaves. Czinczar's arrival was greeted by a roar of excitement. The cheers did not die down until long after he had entered the building.

He talked over the situation with some of the slave officers, and found them calm and confident. According to their estimates sixty thousand Linnan soldiers had landed in the first wave. The fact that that was exactly the number of barbarians who had originally invaded the city did not seem to occur to the slaves. But the comparison struck Czinczar sharply. He wondered if it was designed to have some symbolical meaning.

The possibility made him sardonic. Not symbols but swords spoke the language of victory.

As the afternoon dragged on, the Linnan attack was being held everywhere. The box was delivered from the palace about three. It was dripping badly, and since there was no longer any immediate danger, Czinczar sent a messenger to Meewan.

At three-thirty Meewan came in grinning broadly. He was followed by slave Linnans carrying a sedan chair. In the chair, bound hand and foot, was the acting Lord Leader of Linn.

There was complete silence as the chair was set down, and the slaves withdrew.

Clane studied the barbarian leader with a genuine interest. His grandmother's opinion of the man had impressed him more than he cared to admit. The question was, could this strong-looking, fine-looking military genius be panicked into thinking that the atom gods existed? Panicked now, during the next half hour?

Fortunately, for the first time in his career as an atomic scientist, he had behind him the greatest power ever developed by the wizards of the fabulous days of the legends. He saw that the impersonal expression on the other's face was transforming into the beginning of contempt.

"By the god pits," said Czinczar in disgust, "you Linnans are all the same—weaklings every one."

Clane said nothing. He had looked often with regret into mirrors that showed him exactly what Czinczar was seeing: A slim, young man with a face that was white and womanish and . . . well, it couldn't be helped.

Czinczar's face changed again. There was suddenly irony in it.

"I am speaking," he asked politely, "to Lord Clane Linn? We have not made a mistake."

Clane couldn't let the opening pass. "No mistake," he said quietly. "I came into Linn for the sole purpose of talking to you while the battle was on. And here I am."

It must have sounded ridiculous, coming from a man bound as he was. The near guards guffawed, and Meewan giggled. Only Czinczar showed no sign. And his marvelous voice was as steady as steel as he said:

"I have not the time to flirt with words, nor the inclination. I can see that you are counting on something to save you, and I presume it has something to do with your knowledge of atomic energy."

He fingered the rod of force suggestively. "So far as I can see, we can kill you in less than a second whenever we desire."

Clane shook his head. "You are in error. It is quite impossible for you to kill me."

There was a sound from Meewan. The engineer came forward.

"Czinczar," he said darkly, "this man is intolerable. Give me permission to slap his face, and we shall see if his atom gods protect him from indignity."

Czinczar waved him aside. But he

stared down at the prisoner with eyes that were unnormally bright. The swiftness with which tension had come into the room amazed him. And, incredibly, it was the prisoner who had seized the advantage—"Impossible to kill me!" In one sentence he dared them to make the attempt.

As he stood hesitating, an officer came in with a report. Except for a tiny note, everything was favorable. The note was about prisoners: "All have been told that a great miracle will win the battle for the Linnans. I mention this for what it is worth—"

Czinczar returned to his prisoner, and there was a crinkle of frown in his forehead. He had been careful in his handling of Clane as a matter of common sense, not because he anticipated disaster. But now, quite frankly, he admitted to himself that the man was not reacting normally.

The words Clane had spoken had a ring in them, a conviction that could no longer be ignored. The purpose of his own invasion of the Linnan empire could be in danger. He said urgently:

"I have something to show you. No attempt will be made to kill you until you have seen it. For your part, do nothing hasty, take no action, whatever power you have, until you have gazed with understanding."

He was aware of Meewan giving him an astounded glance. "Power!" exclaimed the designer, and it was like a curse. "The power *he* has!"

Czinczar paid no attention. This was his own special secret, and there could be no delay.

"Guards," he said, "bring that box over here."

It was soaking wet when they brought it. It left a dirty trail of water on the priceless rug, and a pool began to accumulate immediately where it was set down.

There was a delay while sweating men pried off the top. Even the guards at far doors strained to see the contents.

A gasp of horror broke the tension of waiting.

What was inside was about eight feet long. Its width was indeterminable, for there seemed to be folds in its body that gave an impression of great size. It had obviously died only a short time before it was packed in the ice.

It looked fresh, almost alive.

It lay there in its case of ice, unhuman, staring with sightless, baleful eyes at the ornate ceiling.

Clane looked up finally into Czinczar's waiting eyes. He said slowly:

"Why are you showing this to me?"

"It would be a grave error," said Czinczar, "for either of us to destroy each other's armies."

"You are asking for mercy?"

That was too strong to take. The barbarian showed his teeth in a snarl. "I am asking for common sense," he said.

"It's impossible," said Clane. "The people must have their revenge. In victory, they will accept nothing less than your death."

The words brought an obscene curse from Meewan. "Czinczar," he shouted, "what is all this nonsense? I have never seen you like this. I follow no man who accepts defeat in advance. I'll show you what we'll do with this . . . this—"

He broke off: "Guards, put a spear into him."

Nobody moved. The soldiers looked uneasily at Czinczar, who nodded coolly.

"Go right ahead," he said. "If he can be killed, I'd like to know."

Still nobody moved. It was apparently too mild an order, or something of the leader's tension had communicated to the men. They looked at each other, and they were standing there doubtfully when Meewan snatched a sword from one of them, and turned towards the bound man.

That was as far as he got.

Where he had been was a ball of light.

"Try," came the voice of Clane, "to use the rod of force against me." A fateful pause. "Try. It won't kill you."

Czinczar raised the rod of force, and pressed the activator.

Nothing happened—Wait! The ball of light was growing brighter.

Clane's voice split the silence tantalizingly: "Do you still not believe in the gods?"

"I am surprised," said Czinczar, "that you do not fear the spread of superstition more than the spread of knowledge. We so-called barbarians," he said proudly, "despise you for your attempt to fence in the human spirit. We are free thinkers, and all your atomic energy will fail in the end to imprison us."

He shrugged. "As for your control over that ball, I do not pretend to understand it."

At last, he had shocked the mutation out of his ice-cold manner. "You actually," said Clane incredulously, "do not believe in the atom gods?"

"Guards," shouted Czinczar piercingly, "attack him from every side."

The ball of light flickered but did not seem to move.

There were no guards.

"Now do you believe?" Clane asked.

The barbarian looked haggard and old. But he shook his head.

"I have lost the war," he mumbled. "Only that I recognize. It is up to you to take up the mantle which has fallen from my shoulders."

The smaller man gazed at him wonderingly. And then, the bonds fell from him as if they did not exist. He stood up, and now that crown among all the jewels of the ages rode above his head in a matchlessly perfect rhythm with his movements.

Czinczar said stubbornly, "It would be a mistake to kill any able bodied man, slave or otherwise."

Clane said, "The gods demand absolute surrender."

Czinczar said in fury, "You fool, I am offering you the solar system. Has this monster in the box not changed your mind in the slightest degree?"

"It has."

"But then—"

"I do not," said Clane, "believe in joint leadership arrangements."

A pause. Then:

"You have come far—who once used his power merely to stay alive."

"Yes," said Clane, "I have come far."

"Will you promise to try for the Lord Leadership?"

"I," Clane said, "can promise nothing."

They looked at each other, two men who almost understood each other. It was Czinczar who broke the silence:

"I make an absolute surrender," he said, "to you, and you alone, of all my forces—in the belief that you have the courage and common sense to shirk none of your new duties as Protector of the Solar System.

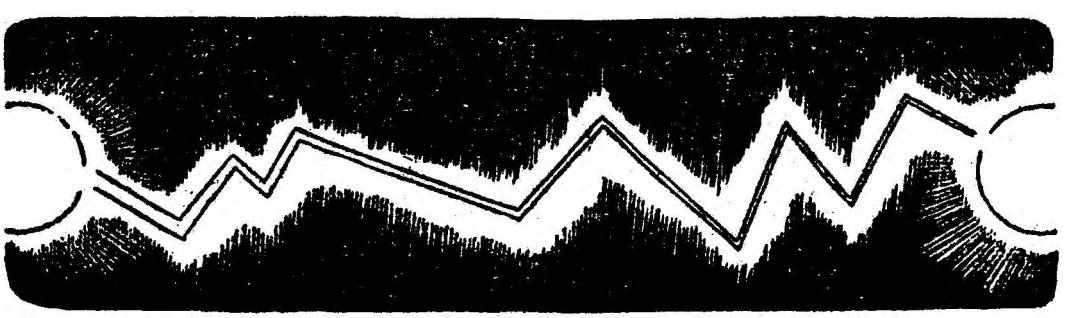
"It was a role," he finished somewhat unnecessarily, "that I originally intended for myself."

In a well-guarded room in a remote suburb of Linn, a core of energy rolled sedately back and forth along a narrow path. In all the solar system there was nothing else like that core. It looked small, but that was an illusion of man's senses. The books that described it, and the men who had written the books, knew but a part of its secrets.

They knew that the micro-universe inside it pulsed with a multiform of minus forces. It reacted to cosmic rays and atomic energy like some insatiable sponge. No sub-molecular energy released in its presence could escape it. And the moment it reached its own strange variation of critical mass it could start a meson chain reaction in anything it touched.

One weakness it had—and men had seized upon that in their own greedy fashion—it imitated thought. Or so it seemed.

So—it—seemed.



THE DREAMERS

By MICHAEL YAMIN

Some men dream of reaching the stars, the power to escape the Solar System. Some men dream of power—the power to rule. And the trouble is that angry action is so much easier for men than is the slow, hard process of thinking—

It was strange to roam through the Station that had once echoed with all the vigorous noise of man and his machines; that had once been the spearhead of the endeavor that was to give his species its greatest, most audacious conquest, and to hear only the silence of space, accentuated by the sound of his solitary footfalls. Before, he had shouted occasionally, to break the silence that was that of the temple of aloof gods, of gods of space that had forsaken Homo sapiens; but the echoes, rushing down the steel corridors, to return, faint and fainter again, around the scarred corners, had been far wore than the hush of space. He could, in the silence, find a sort of communion with the powers of space, a resignation to the fate that had overtaken so many races before his. But the walls shone bright in places, under the lights that still burned; and the metallic gleams bit deep with the memory of the great scintillating machines of steel and glass that had fought with living power for man against the hostile Universe that was his last frontier. Or, rather, had seemed to be!

View windows were scarce. There had been many, broad areas of invisible crystal through which the dreamers and builders and seekers for truth and the bold adventurers of space had looked with challenge at the cold, aloof, remote stars and at the vast flank of the Earth looming dark or blue-shining; dwarfing the tiny, spinning cylinder of the Outer Station that sped on its swift orbit just beyond the last tenuous streamers of atmosphere. But most of the windows looking on the worlds were broken, their bright shards littering the floors where the watchers had stood; and the turrets and blisters which had been built to accommodate them were airless, their perishable contents dessicated in the vacuum of the void, sealed off by automatic doors from the body of the Station and from the man who wandered lonely through the echoing corridors of the crowning achievement of his species. Some of the dry organic matter lying in the ruptured compartments had been his companions, his co-workers in the struggle to storm the stars, to add more knowledge and power to the store of man. He wished vaguely he were with them—but passingly, without any real emotion. He had been drained of emotion—he was a machine, a thinking robot drifting aimlessly along scarred passages, through wreckage-strewn compartments. Now he stood in the one remaining view-turret, among twisted, weapon-gripping things that had been men, and looked passionlessly at the dark cliff that was the Earth.

The darkness was unbroken now. The flares that had leaped into life at scattered points and then had faded into darkness no longer appeared. Those flares had been the light of cities exploding into incandescent vapor under the terrible temperatures and pressures of atomic bombs. He wondered vaguely who had started the war. Nobody, here on the Station, had known; possibly nobody anywhere knew. There were just the intermittent, sparkling nova that had appeared on that dark cliff on Earth, and the radio room that reported city after city off the air—forever.

The tension had grown and grown in the corridors and compartments of the Station; men had watched each other warily as they went half-heartedly about the work that had been meant to free humanity from its prison of gravity. The tension had mounted—just as it must have on Earth—and, finally, it had snapped. Then there was shooting in the Station of Space, and the roar of explosives in the echoing steel structure. He didn't know who started that, either. He remembered, as in another life, slinking, gun in hand, from compartment to

compartment, from laboratory to laboratory; shooting at anonymous shapes that shot back at him, throwing the makeshift bombs someone had put together in a chemistry laboratory. Then the shots and blasts became less and less frequent, just as had the flashes below, and now he stood alone and emotionless before the one remaining view window, and looked at the Earth.

And, as he stood there, emotion began to return.

He was an American. He remembered that. There, that blue-brown shape on Earth that came into view as the Station swung around to the sunlit side of the planet that was America. The flashes had been very frequent there. He thought of how New York must look now, New York and Chicago and San Francisco and Cleveland and all the cities, tall and low, great and sprawling or small and quiet, where the burning flashes had appeared in the night. He thought of the broken buildings, and the trapped and burned people. His vague desire for death was gone, now. He wanted to live to see the perpetrators of this deed punished—not that there was any punishment that could even remotely repay them for their crime. But he wanted to live, and try to find one.

He smelled the air. Still good. Apparently, the automatic machines of the Station had not been harmed by the fight that had exterminated its inhabitants. The lights still burned; the atomic generator that powered the Station must still be running. It would be a long time before that needed attention, but the air purifier would have to be tended to within two weeks, and he couldn't do that himself. By that time, however, he would know his fate—surely before then, if there were any ships on Earth left capable of rising to the Station, they would be here. Somehow he knew that the ships that came would be American. Then he would be able to fight against the murderers of his nation.

He walked through the Station, purposively now, towards the space lock. He would wait there for the sharp-nosed ships that he knew would come soon. The thought of revenge exhilarated him. Death to the murderers! To the aliens who had killed his people!

But, strangely, there was no hate in him for the sprawled, international shapes that lay along the corridors—even toward those he had killed himself. Toward them, he felt only sadness—and brotherhood.

He had to wait, there by the lock, less than a day before the ships came.

He felt the vibration of the Station as the first docked, in the hollow at the great cylinder's end. There was fumbling on the other side of the lock, and for a moment he was afraid that they were going to let the air rush out of the Station, under the impression that it was empty or held by enemies. But the inner door swung safely open, and spacesuited figures came through, and froze as they saw him standing there. The spacesuits were American design.

"I'm James Curran," he babbled. "Dr. James Curran, Chemist. I'm an American. I'm the only one left. I'm an American—"

The gray-steel fittings of the lock blurred before his eyes as the figures came towards him. As they reached him, everything went dark.

Were those stars, that speckled the view before his eyes? He had always liked to look at the stars, from his earliest childhood. Here on the Station he could look at them more closely than he had ever before. They shone small and cold; steady, tiny specks of light against the silver-hazed darkness of space. Some day he would watch one swell and swell in the forward view plate of a ship. Not really a star, he thought sadly, but a planet; but some day, someone would actually watch a star grow and stand out from its fellows as first a tiny disk, then a round, bright sun that you could not look at with bare eyes. Someone would send his ship circling about the new sun to find the planets, the new lands unknown to men. That was what he, and all the other humans of this Station worked for so hard.

An interesting trail he was on now. A way to increase the energy of combustion of any molecule. If it worked, the interplanetary fuel problem would be solved, without any need to battle with the problem of applying atomic energy to a reaction engine. Fuels synthesized under the influence of certain fields—von Hohenburg had first discovered this fact—held more energy in their molecules than the same fuels made in the ordinary way. They had to stay in the fields, however, or they would simply release their energy and revert to their original form—the . . . The Nakashira field. He remembered now. He was looking for the compounds or elements for which the Nakashira effect was a maximum, to try to form an explanation for the phenomenon. Could it be— No,

Leblanc had tried that idea, and got nowhere—unless those observations that Spirelli had rejected as unreliable were correct after all.

Were they stars? He opened his eyes wide, trying to focus. He blinked, tried again. Suddenly everything stood out sharp and clear. They were spots where bullets had chipped the paint off a steel ceiling. He lay in a bed in a strange room, a man in uniform lounging in a chair nearby. He remembered all that had happened.

All dead. All his comrades, his coworkers — Nakashira, von Hohenburg, Leblanc, Spirelli. A deep pang of sorrow and loss pierced him, and for a moment the desire for death that had filled him when first he was left alone in the echoing Station returned.

He must have moved, or made a noise, for the man in uniform was on his feet and by the bedside. "You awake, sir? I'm ordered to take you to the general as soon as you can walk."

The general. The armed force that had landed on the Station. The Americans. Revenge for America. "Immediately," he said. "You should have woke me."

"Well, we figured you needed the rest," said the soldier. "You keeled over before you'd told us more than your name." Curran was struggling to his feet. "Here, let me help you."

They walked down a corridor that was alive with uniformed men at urgent-seeming tasks. Curran remembered it when the silence of space filled it with echoes, and before, when all the urge of men towards the stars had culminated and combined here. It seemed different, with these silent and busy men in uniform pacing briskly along, on errands of war.

The compartment of their destination had been the office of the head of the Division of Astronomy. An aide took him from his guide, led him into the inner office immediately. Several high-ranking officers sat about the dead astronomer's desk. The one in the center, lean and hawk-faced, was introduced as Major-general Coates.

"Dr. Curran," he began without ceremony, "you probably realize that we are here to convert this Station to a base from which we can operate space patrols and launch rockets at objectives on Earth."

It was designed as a base from which to operate exploring parties and launch rockets at the stars, Curran thought with bitter irony. *Revenge for America!* screamed a voice in his mind. "I understand, sir," he said.

"In doing this," the general continued, "we naturally need all the information on the structure of the Station that we can get. Unfortunately, most of those who can give us such information are dead, either on Earth or here, or are in enemy countries. You realize that every other country is an enemy." He paused, apparently for response. Curran nodded.

"Therefore you will go with Lieutenant-colonel Grimm, and tell him all you know about the details of construction and location of this Station. I realize that this is not in your field, but having lived here, you must have picked up more information about it than is available to most people elswhere. You will tell all that you possibly can. Remember, Curran, this is for America!"

"Yes, in revenge for America," said Curran almost automatically.

"Revenge—Well, yes. Yes, Curran! In revenge!"

He sat in an office with star photographs on the walls, and answered questions. Grimm was an expert questioner. His queries were designed to start Curran talking, to bring out details of construction and designs that he never knew he knew. Grimm did not let him wander from the topic on which he sought information, though. Digression to another part of function of the Station brought new guiding questions.

The Station was a great cylinder swinging on its swift orbit about the Earth, and spinning on its axis to provide pseudogravity outward from the center. Such stations had been described and discussed long before the first rocket had left atmosphere, and thus were nothing new. There had even been stories written about them.

The long axis of the Station kept a steady alignment in space. This was for the benefit of the astronomers, who had their telescope at one end of the cylinder. "Inconvenient," mused Grimm. "It would have been better for our purpose if one end always pointed to the Earth, or something like that."

But when the Station was built, we weren't thinking of Earth. We were thinking of the stars.

The telescope at one end of the cylinder, mounted to counteract the Station's rapid rotation. The landing tubes at the other end, through which they received supplies from Earth and from which they hoped to launch the first interplanetary ships. That was where the Station's orbital velocity came in.

Almost five miles a second, it would give the ships a tremendous boost towards the seven miles per second needed to break free from Earth. "I wish it weren't so high," said Grimm. "It'll complicate aiming the rockets."

But we weren't thinking of dropping rockets to Earth. We were going to throw them to Mars and to Venus, and beyond.

The blisters in which were the great view windows, were outside—below—the bottom level of the cylinder proper. The vacuum labs were near the outer skin, and the low-gravity labs were at the Station's axis. The other turrets were the radiation labs and the shielded low-temperature labs. "We'll convert those blister-labs into gun-turrets and rocket-launchers," mused Grimm.

And more and more, down to points of engineering detail that the chemist could not appreciate, though he could describe them. He forced himself to consider the Station as the officer did, as a fortress suspended in the sky above the Earth, to spread death and destruction across the land below. But the star photographs on the walls of the room stared out at him, and he ached inwardly at the sight of his lifelong goal. *Revenge for America,* he thought to himself, and he held his mind firmly to the task at hand. But the stars looked out reproachfully from the walls.

The inquisition seemed endless. After a while, Curran and Grimm left the office and started a tour of the Station, to refresh Curran's memory with the actual sight and presence of the machines and structure which he only partly understood. Everywhere the conversion of the Station was evident. Khaki-clad men worked in the corridors and compartments; welding arcs lit the piles of shattered and discarded scientific equipment that could be of no use to the Station in its new role of a fortress. The noise of riveters reminded Currant of the days when the Station was first being built, and the rattle had been echoed into a triumphant roll of drums heralding the rise of Man from his Earthbound beginnings to new mastery among the stars. But it sounded different now. It sounded like machine guns

Then, the Army engineers began to reach the end of Curran's knowledge, and to go beyond it, as they got the feel of their projects. He was only called, now, from time to time, in cases which lagged behind the general level of progress. He had more time to see what was being done to the Station.

Ships had been docking and leaving continuously. The vibration of the contact of ships and Station was almost constantly felt in the end of the Station near the lock. The ships had disgorged tools, and men and weapons—guns and chemical-explosive rocket-torpedoes to defend against enemy attack on the Station itself, and the great, sleek, rocket-driven, atomic bombs that had decimated the world below, and were now to dominate it from the Station; and the rocket-launching devices, and radars, and the intricate gun-pointing and rocket-directing machinery.

Most of the long-range equipment had gone to the astronomical observatory at the far end of the cylinder from the lock. Use would be made of the devices that had kept the telescope pointed at the desired object. But Curran had seen the great telescope itself, whose mounting had been so laborious and so painstaking, cut from its moorings with torches and stored, piece by piece, in a demolished laboratory.

The broken-walled blisters and other airless compartments were being repaired, or, more often, merely being cleared of wreckage by space-suited men and fitted out with guns and rockets to be operated by remote control, or in a pinch, by crews in spacesuits. Laboratories became arsenals. The shops where the first interplanetary ship was in the process of construction were readied for the repair of weapons.

And the bodies of the previous occupants of the Station, when it had been the pinnacle of all man's peaceful progress, were being cleared from the places where they had labored and dreamed of conquest of the stars. There, they would only get in the way of the new men, the men of war. Curran, in his wanderings through the Station, saw the cold-laboratory where they were being taken.

"What will you do with them?" he asked a sergeant he found there.

"When we get them all in and sorted," the man replied, "we'll drop the temperature of this place down as far as it'll go, and leave them until things sorta settle down. Eventually, I guess, they'll go back to Earth for burial or cremation."

Curran's mind caught at the word. "Sorted?"

"Sure!" The man was astonished. "According to nationality. You wouldn't want Americans mixed in with anyone else, would you?"

General Coates had sent for him. The furor of construction was well under way, and Curran's job had dropped out from under him.

The general sat in the astronomer's office, drinking coffee and mopping his brow. He was alone, now. "Sit down, Curran!" he said. "I've got a breathing spell for a few minutes. I understand you've given all the information you can?"

"Yes, sir," answered Curran. "If it will help take revenge for America—"

"Revenge," said the general, oddly. "Oh, yes, Curran. Don't worry about that. But you seem to have done quite a bit for America before we ever got here. How did you ever come to be the only man alive on the Station?"

The dull ache that had never left Curran swelled intolerably within him at the thought of casting his mind back over those nightmarish hours that had brought the Station to ruin. "I'd rather not, sir—"

"Oh, come now, Curran. There's no need to be modest. You know, you'll probably be decorated for this."

It hurt. Every word hurt. But—*You'll have to tell it eventually*, he thought, and forced himself over the tale, despite the mental anguish. It was penance for his dead comrades.

There was Lenormand, who had seen the first flares appear through the view window where he had happened to be standing. He had rushed into Curran's lab, in a state alternating between dazed horror and hysteria. There was Burroughs, who had been among those who crowded into the blister when the news first reached them, and had seen the great light that bloomed where he located his city of Manchester, and had had to be restrained after he had hurled himself against the clear crystal, trying to throw himself out into space, to be nearer his wife and child. He remembered how he himself had dropped a valuable and irreplaceable beaker of solution, and had flung the heavy and fragile Nakashira generator to the floor after it, in insane, ineffectual violence when he comprehended the shocking news.

Then the astronomers had turned their telescopes Earthward, and the news was confirmed in terms that chilled the men who saw with horror and inflamed them with burning, objectless rage.

"Dr. Svoboda called a general assembly," Curran went on. There was Svoboda, the gray-haired biologist that the UN had placed in charge of its Outer Station. His voice shook, and for the first time he had appeared old. " 'We must remain above this horror on Earth,' " he had said. " 'After the bombing and the shooting is over, the inhabitants of the planet will have sunk, in many respects, to a Neolithic existence. We, here, are self-sufficient. We must preserve science, and learning, and civilization, and return to Earth when the time comes, to reestablish order, in such a way that a catastrophe like this can never happen again. And we must keep on with our work on the *Argo*, so that if Earth is impossible to civilize, we can establish a colony on Venus, or even on Mars, that will never have a war. It will be difficult, but we must—' " Svoboda was dead now, thought Curran. He was a dreamer, and there is no place for dreamers while the flares burst hot and blue-white in the night of a tortured world.

But the tension had grown. He saw the imperturbable Chang, in the radio room, clenching and unclenching his hands as the operators on the other end of the Station's beam to Earth called the black roll of chaos, and the list of cities off the air swelled. Off the air. We are sorry to interrupt this program. There will be a short delay of several centuries. Or millennia.

"I don't think it was the scientists who started it," said Curran. "It must have been the other personnel." But a Turk and a Greek got into a fist fight, and an Australian leaped at a Japanese and tried to strangle him, and a Moslem from Pakistan stabbed a Hindu in the stomach. Friction is contagious. Soon there came word to those who were trying fumblingly to work that a Paraguayan radio engineer had brained a Bolivian physicist with a wrench, and that a Heidelburg Ph.D. had had to be forcibly separated from one from Cambridge.

Then all pretense of continuing the normal work of the Station had collapsed, and men had gathered into whispering groups—groups which, for the first time in the Station's history, formed according to nationality.

"We Americans were all pretty bewildered at first," continued Curran. "We didn't know just what had happened, or what was going to happen; we stayed away from everyone else because we didn't know what any group might do at any moment. It had just penetrated to us that someone had *started* the shooting on Earth; we thought that whoever it was undoubtedly had agents on the Station, and we didn't know who they might be."

Then the fighting had begun to lose its

sporadic and individual nature. Curran remembered how a group of Spaniards had invaded a room where some Frenchmen were holding a council of war, and how the first shots ever heard on the Station had echoed through the corridors. The sound, and the smell of powder, had been a catalyst to the violent release of the tremendous tension that had built up. Open war raged. The Americans held aloof for a while; then a chance shot had killed MacDonald—Curran still remembered how the physicist had looked as he fell—and they were plunged into the battle. Everyone was their enemy. Bombs from abroad had fallen on America—the men from abroad that had sent them must pay for their crime! Kill the aliens! Revenge for America!

"We began manufacturing bombs," said Curran. He remembered storming into a lab with the others, the shots that had made it theirs. The frantic assembly of makeshift equipment, of raw materials. Armed men around the lab, in all six directions, on guard.

The first bombs coming off the haywired assembly line. The first of them hurled down a corridor against an enemy attack. The carnage of the explosion. "That'll show them, boys! Come on!"

Firing along corridors. Dropping to the floor as bullets ricocheted by overhead. Creeping to a corner. Firing down the cross-corridor. Pull back quickly. Give me a bomb. Another corridor cleared.

Throwing bombs into a compartment. Flatten yourself against the steel wall outside the door as they explode. Firing into the room. No reply. No sound. Go in and make sure. Shoot them if you think they're faking. Another room ours. Revenge for America!

Here's a blister. Big, broad window. Strongly held. Battling to the stairwell. Williams down. Where's Jones? Saw him a minute ago. Three bombs, wired together. There's the glass, with stars behind it. Throw at the stars. Leap back. Crash as the bomb goes off, crash as the air door slams across the stairway to the blister. We won't use that blister for a while—but neither will they.

They? Englishmen, Japanese, Russians, Argentines? Someone said something, a while ago. I didn't listen. They might have been anything. They're aliens, and aliens attacked America. Death to aliens. Revenge for America!

Few hours ago, we only held that chem-lab. Now it's half the Station. Where's Rogers? Saw him quarter hour ago. Took that goodluck charm of his. His brother might want it. Tough. Where's his brother? Haven't seen him. Let's get that next sector.

Haven't heard so many bombs going off recently. Not so many shots, either. Half the Station. Anyone around? No enemies. Kaplan was with me when we broke into that storeroom. What's happened to him now? Hey, Kaplan! Echoes.

Where am I now? Say, we must have almost three-quarters of the Station. This was deep enemy territory a while ago. Nobody around. Got an alien a few minutes back. Chink or Jap, by his face. Don't know which, didn't look close. Send a rocket around that corner, in case. No result. Nobody there. Pretty near the center of the Station—my weight's low. Where is everybody?

Schwartz! Glad to see you. Where's Ryan? Dunno, saw him maybe half-hour ago. Come on, let's find someone.

Shots. From above. Duck into a compartment. There he is! More shots. Almost no weight, up here. Got him! There he is, drifting through that hatch. Shoot again in case. Revenge for America! Got him, Schwartz! Hey, Schwartz! *Schwartz!*

Then, a lone man, drifting through an echoing Station, soon without hate, without emotion, almost without thought, longing for death.

Curran was silent.

General Coates rose from his chair, paced excitedly across the office. He seemed exhilarated. "Wonderful, Curran! Truly wonderful! A true epic of American heroism!"

Curran was silent. The emotional exhaustion and the longing for death that he had had after the fighting returned with the telling of his story. He heard and saw the general as a figure on a telescreen, perceived through the beginnings of sleep.

"Clever, the way you worked it," said the general. "You held away from the fighting as long as you could, and let the aliens exhaust themselves. And when you did come in, you made sure of superior armament. That's the American way! You can't outsmart a Yankee!"

The general took another turn up and down the office. His excitement was mounting. "But the whole thing is as great an epic of heroism as I've ever heard. To start with just a handful of men and a laboratory, and to take the entire Station against odds! So that it would be ready for us to use as a base when we came! Wonderful!"

He sees only the glory of it, thought Curran. *But my friends and co-workers are dead, and the machines that were to reach the stars are broken.*

"Curran," said the general, "you're going to be decorated—and every American on the Station, posthumously. Or better still—you've shown yourself a true American. How'd you like to come in with us?"

"Come in with you?"

The general paced the office again, thoughtfully now. "Yes, Curran." He considered his words.

"You've shown that you're a true American, but you seem to be a bit confused on one point. I know that you want to help your country, no matter what, but I don't think revenge should be your central motive."

Curran stiffened.

"In a way, you *could* call it revenge. Other countries have been victimizing us for years. We went to war twice to help aliens out of difficulties, and then they got us into the United Nations so that they could force their will on us. They even tried to talk us into disarming, but we—our group—squelched that idea. *We* wouldn't give up *our* atom bombs.

"You see, the people in our group became alarmed some time ago at the way other nations were making a fool of America. Uncle Sap. We realized it was America's destiny to rule the world, and that if things went on the way they were then, we'd be cheated of our birthright. So we organized, got control quietly, and made our plans.

"When we were all ready, we launched a few atom bombs. We dropped them on England, which has been our great enemy all through our history, and we fixed it so that they would appear to come from Russia, which was our other great opponent for domination of the world. The war between them started right away, as we hoped. Then we worked all the other countries into the squabble. We'd made our plans carefully, long ago.

"Of course, we were drawn into it eventually. We had hoped that the aliens would all knock each other out before that became necessary, but someone began throwing bombs our way sooner than we expected it. But we absorbed our losses; we were ready for bombing, and nobody else was. Anyway, most true Americans don't live in the big cities, and our greatest percentage loss was on the East Coast which is full of aliens and alien-minded people, anyway. Now, our armed forces have come out of hiding, and we've taken over the world. We'll rebuild it our way—an American world! The world is ours!

"And you—you've shown yourself a true American hero by the way you cleaned out the aliens here on the Station. Your group waited until the aliens were exhausted, just as we did; you absorbed heavy losses, as we did on Earth; but you came out on top. You have no idea how valuable this Station is to our plans; we can command all Earth with just the Station! But we need men like you in our Reconstruction. How about it? Will you come in with us?"

Curran rose tautly from his chair. He was quivering; he hoped the general didn't notice it. "I'll . . . I'll think about it," he said. He went quickly out of the room.

He swung unseeingly down the long corridors of the Outer Station, the corridors that echoed with the sound of preparation of war. "Revenge for America." The words beat a bitter, sardonic rhythm in his brain.

Revenge for America. Revenge for the tall, and low, the sprawling and the crossroads cities, that lay in radioactive ruin across America. But most "true Americans" don't live in the big cities, he told himself bitterly. They don't deserve revenge.

These were the men who had destroyed a world groping towards salvation. A world of aliens. Aliens don't count. Only "true Americans" count. An "American" world.

They call themselves Americans, and they lay waste and conquer a world with all the treacherous savagery of a Jenghi-Khan, with all the muddy "super-race" rationalization of a Hitler!

These were the men who had destroyed the Station of Space, he raged mentally, as he paced blindly along the corridors. "We can command all Earth with the Station!" The Station that had been meant to serve as the spearhead for the conquest of the stars—for all men! The builders of this Station had looked up, not down.

The ghosts of all the men of science who had worked here for an ideal seemed to walk with him. Nakashira, and von Hohenburg, and Leblanc and Spirelli, and old Svoboda. And with them, others. Lavoisier and Mendeleef and Einstein and Archimedes and Newton and Faraday. Fermi and Bohr and Kelvin and Curie. These dreamers had looked up to the stars—how often had their dreams been

turned to the horrible task of crushing men to dust!

And this *patriot*, this pseudo-American wanted him to join in that perversion of science. He hated all those scheming xenophobes who used their cheap tricks of emotionalism and "patriotism" to divide science into nationalities and to turn scientists against each other. An "American" world! Rule Britannia! Hail, Mother Russia! Deutschland über Alles! Banzai, Dai Nippon!

And, probably, after they had grown tired of gloating over their "American" world, they would consider again with their bloody minds the smashed work of the dreamers of the stars. The Station would again become the spearhead of the conquest of space—with a difference. An "American" universe! He heard Coates' voice: "You wouldn't want to share the stars with all those foreigners, would you?"

These uniformed, military maggots who had neved invented so much as a stone ax, but preyed on the minds of scientists for fiendish instruments of death!

He strode bitterly along the echoing corridors. Occasionally a soldier looked up in surprise at his set, terrible face.

No, he thought, it wasn't only the military men, wasn't only their bigoted nationalism. They were the worst, the culmination and the symbol of it all, but they weren't what was basically wrong. What was basically wrong was that deep primeval kink in the minds of all men, the flaw of unreason that could, in an instant, under the proper circumstances, return an intelligent, sensitive individual, a dreamer, a *man* to depths of elemental fury beyond the cavemen, beyond even the savage unthinking animals from which the race had sprung —the flaw that had seized on the minds and emotions of a world of men and plummeted them into the long and dark agony of an age in which primitive fury and fanaticism would rule.

He remembered his screaming desire for revenge, his burning hate for all foreigners during the battle for the Station. He remembered how he had instantly assumed that the aliens had attacked America when he had seen the flashes on Earth. He remembered the insane, battling beasts that the scientists of the Station—the dreamers—had become. "And this is the animal we've been trying to give the stars to play with," he said softly.

The new-fallen animal that had taken the point of greatest advance towards the stars so far, and had made it a fortress to drop bombs on other animals of the same species on Earth. *The Dark-Age animal who would later use this Station to spread war and ruin and death among the shining stars, to enslave any beings living upon them who were less animals and more—men.*

Not if he could help it.

He turned his swift footsteps towards a stairway. Up and up he climbed, towards the weightless center of the Station, where hummed the atomic generator that powered it. Up and up, now leaping from deck to deck, as weight decreased. Up and up, faster and faster.

Just so had civilization climbed, higher and higher, faster and faster, from the savage barbarism after Rome's fall, until it had almost reached the pinnacle of reason and science and law and freedom to dream, had almost reached the stars—only to crumble and fall under the ancient cosmic fury of the primitive shadows of unreason lurking in the dim recesses of the human brain. The stars were Man's ideal. They were the dreams come true, the will-o'-the-wisp dreams of truth and reason, justice and freedom, untarnished by the brute unreason that had seized Man. Now the light had receded from Earth, and the fragile ideal of the stars was within the defiling grasp of the savages the civilized men of the Twentieth Century had become. The grasp must be broken. Dark-Age men must not be allowed to spread their terror and war beyond the confines of their weary world —not until civilization and reason had returned.

He remembered how Maroni, in charge of the power plant in those dead days before the war, had showed him how a few minutes work could transform the compact plutonium reactor into a bomb more violent than the first ones exploded at New Merico and over Japan and at Bikini. It had taken the greatest physicists of the world years to discover how to make a bomb out of fissionable material. Now one man could make an atomic bomb out of a chain reactor in a quarter of an hour. Progress.

He entered the shielded room. Guards had grown accustomed to passing him into any part of the Station. He floated to the reactor controls, said to the soldier there: "General Coates sent me up here. Seems there's some trouble with power supply. I'm supposed to fix it. You can

step out for a smoke." The man left with alacrity. He knew the plant was fully automatic, but he still did not like to be left alone with it.

Curran opened a panel, exposed the control circuits of the pile. He knew just what he had to do. The circuits that had to be changed seemed to glow, to stand out from the others. He started to work.

This is best, he thought. The "patriots" who ruled the world now could never reconstruct the Station. They had rockets, true; but the farthest any rockets yet built could travel starting from Earth, was hardly farther than the Station itself. And the men who could build the rockets that could travel farther were dead—dead of their own folly, and in cold storage in a laboratory downstairs.

The Dark Age would come, and stay long. But, without the Station the barbarians of that age would confine their barbarity to Earth, and would not disturb the serene, dreaming stars. Not until civilization grew again would they be within the reach of Man—and, perhaps, then, men would be wiser.

His hands worked deftly at the circuits. The ghosts that had walked with him before floated about him, and it seemed that they helped him. He thought Faraday handed him a soldering iron, and Newton drew the wire to be cut and re-connected from the involved tangle, and Kelvin checked the work and found it good.

The ghosts were all about him, advising, encouraging, helping. They were not only scientists. They were every man who had ever looked at the stars since Homo sapiens stood erect, and dreamed.

There was a disturbance at the entrance to the power room. Coates entered. Strangely, just as the ghosts of the dreamers became steadily more solid and real, Coates and his armed men were fading, fading into unreality.

"Curran! Dr. Curran! What are you doing? Get away from there!" cried the man of war.

"What is it, general?" mocked Curran as his hands worked. "Don't you trust a 'true American'?"

"What are you doing? I never authorized you to come up here!"

"No, and you never authorized me to look at the stars, either! You never authorized anything but the killing of men and the perversion of science!"

The general motioned to a soldier. "No, you don't, general! I can blow up the whole place before a bullet reaches me!" The soldier froze.

Curran was almost done. One connection more. The ghosts pressed close.

"Curran!" called the general. "What do you want? I'll give you anything! Get away from that pile and I'll make you world president! I've got the power to do it! Curran—" the fading man entreated him.

With the ghosts of all the dreamers of all the ages of all the intelligent races of the Universe guiding his hand, Curran made the last connection.

If any man on dark Earth had turned his eyes skyward and starward at that instant, he would have seen a great nova flare bright, and hang for a moment in the sky before fading again swiftly to darkness. And he would have seen the stars, as the moment of blinding flame receded, appear again, far and cold and aloof—and unreachable.

COMMAND

By BERNARD I. KAHN

No matter how good a machine is, or how well designed, if human beings are supposed to operate and service it, a psychotic can make it deadly.

LIEUTENANT NORD CORBETT adjusted his freshly pressed uniform jacket over his thick, broad shoulders, checked to see if the jeweled incrusted wings were exactly horizontal with the first row of spatial exploratory ribbons before entering the wardroom. He well remembered, when he was a junior officer, how the sight of a well dressed, impeccably neat commanding officer, no matter how long they had been spacing, maintained the enthusiasm, confidence and morale of the officers and men.

The wardroom looked like a trimensional pictograph advertising the dining salon of a billionaire's yacht. Soft light from the curving overhead ricocheted from the gleaming, satiny pandamus wood lining the bulkhead, glanced on the spotless linen, flickered on the silverware like liquid flame. In the center of the elliptical table was his own donation to the officers' mess: a massive stand of carmeltia; the fabulously valuable, deathless, roselike flower from Dynia.

He enjoyed dinner with his officers. He refused to pattern himself after other officers of his same class, who as soon as they were given a command, no matter how small, begin to live a life of lofty solitude. They felt such eremitic behavior would automatically make them revered, feared and admired. The majesty that went with command, Lieutenant Nord Corbett, well knew came from mutual respect and not from living in a half world of distant glory.

He quickly noted as he sat at the head of the table, there was still no trace of irking boredom on the alert faces of his ten officers. He looked for evidence of dullness every night at this time. An officer bored with the monotony of spacing was a terrible hazard because he could easily infect others with his own morose discontent.

The steward was at his elbow. From an intricately carved, large silver bowl he pulled a shining metal can, nested in ice. "A lettuce and tomato salad, sir?" Then apologetically, "That's all we have left now."

Nord Corbett nodded. The salad as it emerged from the can looked garden fresh, even to tiny beads of moisture on the crisp leaves.

Nord looked down the table at Ensign Munroe, finance and supply officer. "Fresh canned stores are about gone now, aren't they?" He ladled dressing on the bright green and red vegetables.

"Yes, sir. We'll be on dry stores in about another week," Munroe answered, "unless of course we pass a ship going Earthwards with fresh food."

"Then we'll be on them for the rest of the trip," Nord announced, "we won't pass any ships until we approximate Lanvin."

"We'll only have to eat dry stores for about five or six more months," Ensign Lesnau, the astrogation officer, prophesied.

Hardman, the executive officer, chuckled. "Did you hear that, gentlemen? Please note, Mr. Lesnau announces an ETA for Lanvin plus or minus one month. I'd suggest, captain," he looked at Nord, "you might have Dr. Stacker teach him astrogation."

The laughter that circled the table at the thought of the space surgeon teaching astrogation was as euphoric as a synthetic comedy. Even after one hundred and two days of spacing he still couldn't believe it; the warm thought cloaked his mind these smiling officers were on his first command—Terrestrial Spaceship *FFT-136*. Their holds were filled with agricultural supplies from the Colonial Office on Earth to Lanvin: Planet IV, Sun 3, Sirius System. His feeling of responsibility for the safe execution of this task was like the joy of a father with a new son.

"Captain," Hardman interrupted his

reverie, "you missed a good story. Just before dinner, Munroe was telling me about the most original crime on earth."

"You mean in space," Monroe corrected; he turned to the captain. "My brother tells the story that when he was junior instrument officer on the *Explorer II*, some loose minded spaceman held up the paymaster when they were five light-years from the nearest planet. He knew he couldn't get off the ship with the money. He just thought it would be a good idea."

"Well, it would be a good idea, if he could get by with it," Nord admitted. "Think how much currency those big ships carry. It would make a man fabulously rich."

"Not just small ships. Do you have any idea how much I have in my safe for the District Base at Lanvin?" Munroe asked.

Bickford, the air officer, leaned forward eagerly. "How much do you carry?"

"I've got a million stellars!"

"A million stellars!" Bickford's pale, blue eyes almost extruded. "Why, that's a hundred million dollars."

Munroe nodded. "Captain, Mr. Bickford knows elementary finance. Why can't he be supply officer for a while and let me be air officer?"

"That's a good idea," Lesnau thought aloud. "I'll be space surgeon, too. A complete rotation of all officers. I've been worried about how Mr. Bickford handles the air anyway. He's careless with our chlorophyl. You know air is rather important to us."

"That last is a super-nova of understatement," Dr. Stacker announced.

Bickford leaned across the table, his almost colorless, pale-blue eyes were like tiny, venomous slits. "What do you mean I don't handle the air properly?" His voice was a rasping growl.

"Now, Mr. Bickford, don't get spacey," Nord Corbett cautioned softly. "You know you were only being kidded."

"Don't like to be kidded about my detail," he answered testily. "Go on with the story." He jerked his thin head towards Monroe.

"That's about all there was to it. Of course he was caught and sent to the hospital." He turned to Dr. Stacker. "What kind of illness is that anyway?"

The space surgeon put down his fork. "I would diagnose such a case as being a psychopath."

"Just what is a psychopath?" Nord asked.

"A psychopath is a person with a mental defect which prevents them from learning by experience. Such personalities are usually brilliant, able to learn readily, but when it comes to living with others they are social failures. They are like children, mere emotional infants. Their conduct is ruled solely by impulse. They will think over an idea for a second and then act without considering the consequences to themselves or others. The professional criminal, the pathological liar, the billionaire's son who is repeatedly fined for dropping his yacht into a city, the swindler, kleptomaniac, pyromaniac and moral degenerate are all psychopaths."

"What causes them?" Nord inquired, "and why let them on ships anyway?"

Stacker sighed. "I wish I could answer it all for you." He pulled a package of cigarettes from his pocket, touched the stud on the label, pulled out a lighted cigarette. He inhaled deeply. "The psychopath can only be explained as a vestigial remnant of man's evolutionary development. It is normal for an infant to live solely by impulse, but as mentality develops he learns to make adjustments to life without the origin of too many conflicts. If, however, we lack the ability to learn how to live with others then we will act as a very intelligent animal would act." He flicked ashes on the tray. "Just remember, captain, it is a mental condition which is a stage in man's phylogenetic development."

"Well, how can you tell a psychopath from a normal lug?" Hardman interposed.

"That's easy," Lesnau broke in, "we're not normal. Those on Earth are. If we were normal, do you think we'd be out here ten light-years from home?"

"The files in the Bureau of Spatial Medicine," the space surgeon answered Hardman's question, "maintain accurate records of all illnesses, arrests, domestic difficulties and any other symptom of maladjustment. All ships have physicians aboard who are trained in psychiatry. We make every effort to keep the Service free from the danger of the psychopath."

"Why are they so dangerous?" Hardman asked with a laugh. "Seems to me they are rather absurd."

"I can see the danger," Nord said slowly. "I wonder how much of an item they are on the cause of ships that don't return?"

"I would say they were a tremendous

factor," the medical officer answered. "Think how easily one man could wreck this ship. If he gained access to the tube banks, he could substitute a worn tube and throw our astrogation out of kilter. If he got into the chlorophyl banks, he could infect them and cause asphyxiation, if he could gain access to the bleeder valves he could release all our air into space. If he kept one suit of armor, he would then control the ship," he paused, looked around the table, "and be rich for life."

Hardman looked at the captain. "I hope you keep all the keys around your neck." When the laughter subsided he addressed the doctor again. "Are all men carefully checked?" He indicated Bickford with a nod. "I mean men like political appointees such as Mr. Bickford."

Bickford's pointed chin quivered angrily. "What's the matter with my mind?" He snarled with trembling fury. "Just because I'm not a graduate of the Spatial Academy is no reason to pick on me." He pounded the table angrily. "My cousin who is manager of Synthetic Air got me this job. I was given a highly specialized course in air management." His pale-blue eyes glared at Dr. Stacker. "Just because you silly space surgeons didn't have any reason to examine me doesn't mean my mind isn't as good as yours. You're all just jealous because I have rich relatives. Well," he laughed hysterically, "my mind is just as good as anyone's at this table."

The officers sat stiffly erect in embarrassed silence as they pretended to ignore Bickford's uncalled for, infantile expression of anger. They waited, fumbling with the silverware, gaze fixed on the waxen roselike flowers in the center of the table. The wardroom was so quiet that when one of the stewards placed a serving spoon in the dessert bowl, the click of the silver was startlingly explosive.

"I don't think there is anything the matter with your mind; nor does anybody else." Nord eased the gathering tension. But he felt cold on the inside, as if Pluto's turgid bitter winds were blowing out from his body and through his clothing. His hands and feet felt cold, even his brain seemed frozen as he watched Bickford's thin fingers pluck for a cigarette.

He turned to Dr. Stacker, who was observing the air officer with clinical detachment. "You're the ship's athletic officer, who should I put my money on tonight?"

"I won't commit myself."

"Gentlemen, shall we go on the recreation deck and watch the semifinals? Cooks, stewards and waiters are expected to beat the ship's repair force. It's going to be a good game of laska ball."

Laska ball was an extremely fast, excellent exercise. It was a modified form of basket ball, played on an ellipical court in which the captains could control the location of their team's basket. It was a well adapted sport for the limited recreational space of small ships.

Nord Corbett forced himself to sit through the first half of the game, but not even the electrical speed of the game, the rocketing ball flashing through the oscillating, flickering basket could remove his vague apprehension.

A cold cloud of worry shadowed his mind until he fell asleep.

At 0500, an hour before his usual rising time, Latham, Officer-of-the-Watch, called him.

"Captain, the lattice shows a small cloud of meteoric dust approximately seventy-five thousand kilosecs in diameter. The density is point zero zero four. I get a spectral classification of Fe dash one-three-nine-four dash alpha nine three delta over six. It is located seventy-two light-minutes from our course at one thirty-six degrees above the axial plane. May I have your permission to decelerate to chart the cloud?"

"I'll be out in a few minutes."

He dressed himself quickly with smooth fluid motion. He paused for a moment before opening the panel leading from his flight quarters to the captain's gallery. Visions of his vessel's sleek, silver sides and streamlined length washed the background of his mind like a welcome dream. The Bureau of Ships called it a Dispatch Freighter, but no captain commanding a mighty thousand meter exploring battleship would ever experience the soul-satisfying thrill his ship filled him with. A wave of pure contentment filled him as his eyes ran over the narrow welded seams of the ivory-dyed bukhead. He paused there to listen to his ship; the soft whisper of the muffled air ducts was as soothing as a muted lullaby The thin, tiny creak of the outer hull responding to its airless environment was as thrilling as a triumphant, stellar symphony. A frown of perplexity flickered between his gray eyes as he sniffed the air.

The atmosphere seemed slightly tainted.

It lacked the heady, tingling, euphoric quality the conditioners normally imparted to the ship's atmosphere. One of the tubes working the negatron must have blown during the night. He realized he couldn't depend on Bickford and that he would have to be watched closely. The thought flashed through his mind of the consequences if Bickford were to be careless. What if he got sloppy and something did go wrong with their air? He had once seen the results of slow asphyxiation in an attack transport. He forced the unwelcome memory from his mind.

He stepped out on the gallery.

"Good morning," Nord said as the watch officer snapped to attention.

Three meters below him the helmsmen were bent over the green-lighted circular telegator screen. The tiny red and amber lights over the instrument banks imparted a soft, restful gloom to the darkened bridge.

He walked the length of his gallery. On the right brushing his sleeve were the telepanels: the spy plates hated alike by officers and crew. The plates which brought him visual contact with all compartments of the ship and which he never used except in drills. On his left at waist high level were the master's meters, duplicates of the instrument banks on the bridge deck below.

'Midship, in front of his own telgator screen, he paused, adjusted the magnification of the tiny green light indicating their course and which speared the exact center of the screen. He measured the circumference of the dot with a micrometer of sodium light, ran off the difference in the calibrator.

"Latham," he leaned over the rail.

Latham stepped forward of the steergang, looked up. "Yes, captain."

"Three millionths of a millimeter in ten million miles is not very much angulation, but in fourteen light-years it amounts to several hundred miles of unnecessary travel. You are off your course," he made it sound like a joke between old friends, "three point two angstrom units."

He stepped over to the lattice, checked the dimensions of the nebulous cloud on the screen. A quick glance at the map above his head showed the cloud had never been charted. Under high magnification he could see the lazy whirling of its vortex. He set drift spots on the larger lumps in the periphery, ran up the time scale to see how near it lay on their course.

"Divert twenty-three angstroms on an axial plane—"

"But don't you want to decelerate and study the cloud for the astrographic office?" Latham asked in bewildered surprise.

Nord smiled indulgently. "It would take us a full month to decelerate, jockey back. Then we'd have to start accelerating again and it would take almost three months to come back to terminal velocity. The time loss would be almost four months. Just chart the cloud and let the office worry about the details."

He looked at the air instruments. He studied them so long he was aware he was being watched by the men below. He straightened, checked all the instruments before he leaned over the rail to clasp his hands in what appeared to be benign unconcern.

Just as the 0600 gong announced the change in watch he spoke up. "Mr. Latham, give me your air readings."

"Yes, sir." Latham stepped to the air board. "Pressure in the ship, steady at seven-seventy mm; mean temperature twenty degrees, three degrees fluctuation downwards at 2300. Humidity fifty-two per cent. Air motion: forty meters per minute with seven meter variation every fourteen seconds. Composition of arterial air: oxygen eighteen point four three per cent, carbon dioxide point eight three per cent. Excess negative ions to the order of—"

"That's enough." Nord turned back and looked again at his own board. Something was the matter. What had Bickford neglected to do now? His voice took on cold purpose. "Summon Mr. Bickford for me, please."

Corbett turned abruptly, went into his flight quarters. The steward had already made up his bunk and the compartment was now as neat as that distant day on Earth he had moved into it. He drew a cup of coffee from a gleaming cannister, sipped slowly. It would be a good idea to have Hardman check the entire air system from venous intake to arterial outflow. On second thought, he resolved to do it himself.

He was reading the master log when his yeoman entered the office. "Dr. Stacker and Mr. Hardman request permission to speak to the captain."

"Morning, gentlemen," Nord greeted them; he waved to the cannister and cups, shoved a cigarette box across his

desk. "Help yourself to morning coffee, then toss me your mind."

Hardman turned to Dr. Stacker, his face drawn and cold. "You tell him, Doc."

The space surgeon lit a cigarette, watched the smoke spiral towards the venous duct. "A lad playing laska ball last night fractured a patella. I had a corpsman up all night watching him because sometimes the bone plastic causes pain. He called me at 2315 that the sick bay temp had dropped four degrees."

"What of that? You have your own thermostatic control," Corbett told him.

"That's true," Stacker admitted, "but I usually maintain ship's temp. When the drop came I didn't know whether it came on order from the senior watch officer or . . . or—"

Nord understood the hesitation. The doctor did not want to be an informer. "You mean," he suggested helpfully, "you wondered if the air officer might be careless."

Stacker nodded. "You saw his act last night at dinner. That is not the action of a normal man. That anger was a paranoid reaction to his hatred for all of us and particularly for you. In you he sees the authority he hates so much. That scene crystallized in his mind the determination of what he intended to do to the ship."

Nord felt again as if Pluto's frigid winds were blowing out from the center of his being. Dread like a black frozen cloud enveloped his mind. "What did he intend to do?" His voice was voder cold.

"I don't know." The doctor admitted his ignorance in a tight, hushed voice.

Nord ,was aware of the unperceived worry that flowed over the space surgeon's mind, knew it mirrored his own vague premonition of impending catastrophe. "Go on," he prodded gently.

"I went down to his cabin to investigate. You see I've felt Bickford was a psychopath. No reason you understand," he explained apologetically, "sensed it, an intuitive reaction rather than something of real diagnostic import. He's always been most affable to me, a bit eccentric, but his conduct in the mess except for some vulgar characteristics has been exemplary."

"He seemed O.K. to me," Nord said. "I've made it a point to look for personality change at dinner. He never seemed sour like so many officers do when they get space weary. I never trusted him much," he admitted hesitantly. "I felt that was pure friction between opposing personalities; it seemed to me he was always trying to impress me with his influential relatives."

"They are influential," Dr. Stacker pointed out, "otherwise they could never have gotten him aboard without a psychosomatic examination. When he reported I asked him for permission to contact the Public Health Bureau which maintains medical files on all citizens. He refused. I thought he might have something in his record he was ashamed of and was overly sensitive about it. I asked to examine him myself and he said it wasn't necessary. Well," the physician shrugged his shoulders, "you can't examine a civilian in a military ship against their wishes. After we left lunar quarantine I watched him closely, but as he seemed to adapt to ship's routine I thought I might be wrong. I knew he was money mad, feels wealth will give him the security he lacks. Last night he heard about the wealth on board and because he felt we were not giving him the honor and deference he thought his position warranted he resolved to do something about it and show us how good his mind was.

"He went down to air treatment and got drunk."

"Got drunk!" Nord looked stunned. "Why? How? On what?"

"He used the alcohol showers in air treatment as his bar. Entrance to the chlorophyl banks is through an alcohol bath. The bath is necessary to remove bacteria from the armor, otherwise you would infect the chlorophyl which is about a thousand times more sensitive to infection than a chick embryo.

"I found Bickford clinically intoxicated, he'd passed out in his cabin. I did a blood alcohol on him and found he had four point three milligrams per cent—that's enough alcohol in the blood to make anyone dead drunk. I'm afraid, captain, in having his party he must have infected the chlorophyl, our oxygen is going down and CO_2 is rising."

"That means recharging the tanks." Hardman slapped the arm of his chair violently.

Infected chlorophyl! The spaceman's one great dread. It wasn't the danger of asphyxiation that worried Nord. They had plenty of fresh media to recharge the tanks. But, until the new stuff grew sufficiently to handle the vitiated air they would have to live from stored oxygen. That meant curtailment of recreational activity and with limited exercise came

deterioration of morale. His mind leaped to the crew.

They would be forced to lay in their bunks for hours on end looking at the curving overhead. Corrosion of the spirit from such confinement was the one exciting cause for that most dreaded of all spatial afflictions: Spaceneuroses; the overmastering, unreasoning anxiety syndrome. The claustrophobia that destroyed the very fabric of the mind and that could easily—if long continued—wreck the ship.

And Bickford did it.

Didn't the fool realize his life, too, depended on air? He looked down at the open log on his desk. He closed the book with a snap that strained its metal hinges and wrinkled the sheets of its plastic pages.

He forced his voice to be steady. "Where is Bickford now?"

"He's outside waiting to see you," Hardman answered. "The doctor sobered him up."

Bickford's almost colorless, pale-blue eyes darted a quick apprehensive glance at Dr. Stacker before he turned to stare insolently at the captain. His slack mouth looked as if nature had painted it on his thin, immature face. He jerked his head at the scribespeech on the captain's desk, aimlessly wiped flecks of saliva from his narrow, pointed chin with a pink, silk handkerchief which he quickly thrust into his uniform pocket.

"Mr. Bickford," Nord's voice was ominously calm, "did you check air this morning?"

"Why of course I did," he snapped irritably. He tilted his head, sniffed loudly through his narrow nose. "Seems O.K. to me."

"Did you go to air treatment after the game last night?"

Bickford jerked the handkerchief from his pocket, nervously wiped foamy saliva from his twitching mouth. "I think I did. I turned down the temp five or six degrees, thought the ship too hot."

"A little while later, the medical officer went to your cabin and found that you had been drinking. Do you deny this?" Nord's voice trembled from manifest control.

Bickford forced a weak smile to his lips. He blew a short, explosive whistle of self congratulation. "I was really drunk in my cabin last night. I was just really flooded."

"This is no time for humor, Mr. Bickford. When we planet, I shall charge you with being drunk on duty, carelessness and incompetence and recommend your dismissal from the civilian branch of the Spatial Service."

Bickford shrugged his narrow shoulders. "So what," he answered truculently. His voice became edged with triumph. "My cousin is general manager of Synthetic Air. That's the company who installed. the conditioner aboard this ship. He got me assigned to this job over you academy boys. You're jealous of me. I'll tell him what you've done to me and he'll have the Bureau of Personnel really burn you up. You all thought I was dumb. Told me last night I was crazy. I'll show you how smart I was last night." He started to laugh: a harsh, treble, nerve-chilling laugh. "This is a good joke on you, Corbett. When the green goo goes sour, what're you going to do?"

Nord felt an icy vortex swirl around his heart. He leaned forward, damp palms clasping the arms of his chair. He knew already what the man was going to say.

Bickford wiped tears of exultant laughter from his pale eyes. Stared derisively at the officers. "What're you going to do now? We don't have any extra stock or media aboard. We don't have any more of anything to recharge your tanks."

"What!" Hardman leaped to his feet. Nord placed a restraining hand on his executive officer's arm.

Bickford sneered at his startled expression. "I thought that would get you." He looked down at the captain. "While you were checking the ship at Lunar Quarantine, I traded all our reserve stock of chlorophyl powder and nutrient media for a set of bench tools. I made the deal with the captain of Mr. Brockway's yacht. Do you know who Mr. Brockway is? He's one of the richest men on the inner planets. You see, I intended to go into business on Lanvin—"

"You?" Hardman gurgled. "In business?"

"I was going to make beautiful doll furniture. But now I'm going to be one of the richest men on Lanvin," he said triumphantly. "When I learned how much money we had aboard the ship I decided then to show you how brilliant I really was." He looked at them patronizingly. "I'm going to take the money designed for the base."

"How will you do that?" Corbett's voice was so calm it was unreal.

Bickford laughed unpleasantly. "I'm going to make a chlorine generator. It's easy to make, just electrolysis of salt

water. I'm going to put that into the air system. While you all are being finished, I'll live in space armor. Then I will land the ship on Dynia, that's Planet II., and take the shuttle across to Lanvin."

"But now we know all about it, and we're going to lock you up," Nord said slowly. "Didn't you realize we would know almost instantly when the air went bad?"

The realization of what he had said revealed itself in his widened eyes. His head shook from side to side as he started to whimper. "I never thought of that when I spit into the banks last night."

Hardman came forward, cold deadly purpose etched in the lines about his grim mouth and bitter eyes. Nord knew what he was about to do, knew it would have to be done. Hardman was half a meter from Bickford before he spoke. "This is for the crew," he said and his fist came up like a rocket.

Bickford took the blow, rocked under it, caught the second on his mouth and then Corbett and the doctor were between them, shoving them apart.

"The idiot should be chucked in space," Hardman roared.

Stacker was wiping Bickford's crimson mouth. Corbett released Hardman's arm. "He's a sick man," he said heavily. "Go back to your duty. I'll have Dr. Stacker act as air officer. We'll keep Bickford under armed guard in the sick bay for the remaining seven months of the voyage."

"Seven months! Without air!" Hardman's voice became high with the tension of near hysteria. Then noticing Nord's level cold eyes he apologized. "I'm sorry, sir. I must have lost my temper."

"I understand. We'll forget what happened. Now let's see what we can do about the air." He turned to the doctor. "Take care of the patient. I'll meet you down in air control." He looked at the chronometer. It was 0640. It seemed like hours. "I'll be there in fifteen minutes." He finished abruptly.

Corbett glanced down at the glowing tip of his cigarette. This is what came from having a psychopath aboard. Incidents like this were never discussed at the academy. Departments were always handled smoothly by brisk, efficient men always alert to serve the ship. Not even in fiction were there problems like this unwelcome thing. There, the personalities were always good, pure men at war against mythical creatures, invidious planets, self-centered, unpredictable novas or militant civilizations; never at war against their own personal environment because of the stupidity of politicians who insisted that unexamined, potentially insane men be made a part of the ship's company.

Stacker was sitting, feet propped on the air officer's desk studying the "Handbook of Air Management" when Nord walked in. He stood up at once. "I've got Bickford in the brig ward. He's perfectly safe now. Can't harm himself or anyone else." He touched buttons on the desk top and as the drawers slid out pointed at their contents. "Looks like a rat's nest. He's collected everything in this ship that wasn't welded."

"Never mind Bickford. What can we do about the air?"

"Not very much," Stacker said diagnostically. "You know how this ship handles air?"

"Vaguely. I don't know too much about it. Air management is so vital it's always handled by an officer or civilian specializing in clinical industry." There was no apology for his ignorance. It wasn't his job to know air any more than he was required to know how to practise planetary epidemiology.

"The air system in this ship was designed, installed and maintained by Synthetic Air, Incorporated of Great Kansas. The system uses a modified form of rebreather technic; that is, the unused oxygen is returned to the ship.

"Starting from the venous ducts located in all compartments the air is pulled over a precipitron which removes all dust, oil and water droplets and other curd. It then goes into the separator where the excess oxygen is removed; this passes directly back into the ship's arterial system.

"The remaining atmosphere containing nitrogen and carbon dioxide is then sterilized by passage over plates heated to five hundred degrees, the gases are then cooled and sucked into the ship's lungs.

"These lungs are chlorophyl banks. They are large glassite cylinders filled with synthetic chlorophyl. This is a very delicate substance with no immune property at all and becomes infected readily. Just look at the stuff crosseyed and it starts to decay. Nature protects her chlorophyl by means of the cell membrane but here was use it in its pure protoplasmic state.

"In each tank are actinic generators. As the carbon dioxide trickles up from below photosynthesis converts the carbon

dioxide into carbo-hydrates. Oxygen is a by-product. It's sucked into the negatron, humidified and pushed by blowers through the arterial system."

"Very concise, Doctor," Nord said. "Let's go in and check your new detail."

Air treatment was located on the third deck, just aft the crew's galley in the central section of the ship. The mechanical part of the system was a miracle of chromium and gleaming surgical white. Air sucked through snaking ducts sounded shrilly defiant; the whirring scream of the blowers were the overtones of thin-edged menace. The ducts were shiny with beady sweat and the compartments' cold, dry air was icily chilly.

The air crew stood around with tight, strained faces. Above all the many activities of the ship, they knew how much the thin thread of life depended on their proper performance of duty. When the captain and the doctor walked in, worry lifted from their strong faces and they turned to hide the relief from fear.

"Let's see the banks." Nord shouted above the keening scream of air. He could not help but notice the shining confidence they felt in him.

The chlorophyl banks were normally guarded by locked doors which opened from the alcohol showers. A ten minute alcohol shower on the impervious light weight armor lessened considerably any danger of infecting the chlorophyl banks. Sterile precautions were now unnecessary because the two doors were already partly open.

The space surgeon pointed to a cup by the sump in the deck of the shower. Nord nodded. "Maybe we're lucky he did get drunk or perhaps we wouldn't have caught him before he started putting chlorine into the air system."

Stacker shook his head. "He was too resentful of authority. Long before he would have gotten to that point he would have told you about it in one way or another. He would have had to brag about his mind. The chances are though he would have knocked you out some night, taken the keys to the bleeder valves and released all the air in space."

"Nice guy to have around the house." Nord forced a smile. He gestured towards the inner door. "Shall we go in?"

Normally the four meter vats were glistening green cylinders. Where vitiated air entered from below—because of higher carbon dioxide content—the thick media was a brilliant, leafy green which shaded to a faint glaucous yellow at the top. The compartment should have had the sharp, earthy fragrance of jungle vegetation.

A spasm of despair made Nord wince as he walked into the compartment. The bottom of the cylinders was covered with a thick sediment of sepia-colored muck; ochorous splotches and shafts of putrid yellow matter filled the vats. The surface was a jaundiced froth which bubbled over the top and lay on the metal deck like careless, yolky spotches of sickly yellow paint. The warm, humid air was stifling and the odor of decay was a nauseating stench.

"*Whew,*" Stacker wrinkled his nose in disgust, "Smells like a Venusian privy."

Corbett nodded silently, wiped his sweaty brow. He turned to the air chief who walked into the compartment.

"Did you find any?" Stacker asked eagerly.

"There isn't so much as a can of spare stuff left anywhere," the chief said.

Dr. Stacker turned away and Nord sensed he did not care to discuss a patient's illness with a crew member. "We didn't expect to find any spare media. While Mr. Bickford is ill the space surgeon will be acting air officer." He turned to the physician, waved towards the sick-looking drums. "Can we do anything with this stuff? Resterilize it or something?"

The doctor shook his head sadly. "Dump it in space," he suggested with a wan smile.

"Not yet," Corbett hesitated to dump anything in space except as a last resort. "It's still converting some air." He led the way into Bickford's former office, prowled about the office nervously, studied the air instruments, walked slowly back to the desk, leaned on the corner.

"CO_2 content has gone up a tenth of a point in the last hour. Hadn't you better start using the chemical removers?"

"We won't use those until the per cent gets much higher. Not until it reaches two point five or even three."

"I just noticed we have five thousand kilos of oxygen stored in the bulkheads." A shade of bitterness crept into his voice. "At least he left us that."

Dr. Stacker started figuring with stylus and pad. "The average man," he calculated, "uses an average of five kilos of oxygen in twenty-four hours. We have fifty men. That means twenty days of normal oxygen supply."

"Which is what the bureau says will be normal for all ships."

"Why not try and make it back to Earth. We're only one hundred and three days out."

"I've thought of it," Corbett admitted. "I refused to chart a cloud just a few hours ago because it would take so long to reach terminal velocity once we went back to extropic drive. At our present velocity we couldn't divert at better than a hundred angstroms of angular radius. It would take almost two months to complete our turn and then we'd have to start decelerating for Earth. If we slow and turn, we couldn't reach terminal velocity before having to decelerate again. As far as space time is concerned it's as far one way as it is the other."

The doctor shrugged his shoulders. "Might as well keep on then." His level voice was so impersonal Nord could not help but feel admiration for him.

"Do you have any idea how we might augment our air supply? Maybe," he suggested, "changing the rate of air flow, temp or number of charged ions might help us. You know," the captain admitted candidly, "I don't even know why we change the rate of air flow or charge the air. I once did but I've long since forgotten."

Stacker pulled a plastic cigarette case from his pocket, touched the stud, offered the lighted cigarette to the captain. "It'll probably be our last one," he said taking one for himself.

"In a general way," he said answering the question, "it might be said that moist air is depressing and enervating while dry air is tonic and stimulating. Metabolism slows in warm air, speeds up in cool air. It is also known that air motion is a factor of tremendous importance in ventilation in that it contributes to our sense of well being and comfort. The pat of a current of air upon the skin stimulates the cutaneous sensory fibers, acts directly on metabolism and the vasomotor system.

"Air currents as low as three hundredths meter per second will give a perceptible stimulus to the sensory nerves around the skin and mouth. The variation of air flow and temperature is stimulating and explains the preference of open windows over mechanical systems of air conditioning. This variation is why there is no sensation of stuffiness in modern ships.

"We treat the air here so that it has an ionic content of ten to the sixth per cc of negative ions. Positive ions increase the respiratory rate, B.M.R. and blood pressure. Negative ions produce a feeling of exhilaration and sublime health." He inhaled deeply, let smoke trickle slowly from his nose. "I'd recommend we increase our temperature by five or six degrees, slow down air motion and require all men not actually needed to remain in their bunks. Of course all exercise, smoking, even loud talking will have to be forbidden. I'll change the diet so we'll have a low specific dynamic action, use less oxygen that way. Make the men more groggy, too. We can string out our oxygen another ten days."

Nord squeezed out his cigarette in Bickford's ash tray. "And after that?"

"'Good spacemen never die,'" he quoted a line from the song of the space corps softly, "'they just travel far.'"

"Will it be bad towards the end?"

The doctor looked down at his polished nails. "Very," he whispered. "We'll gasp out our last breath hating the day we were born. It'll not be easy because we'll have so long to know it's coming."

"In fifteen days I'll have the crew write their final letters. I want to write one to my mother and you'll want to write one to your fiancée. You were going to marry when we earthed."

"Isn't there a chance we might cross another ship?"

"There isn't a ship for another three months at least."

"Well we won't be around to see it." Stacker forced a thin laugh. "When the end comes Bickford will really be happy. But he could have done a lot worse things if he'd had more time to think about them. But this will be bad enough."

Nord looked at him steadily. "You'll spare us a bad finale."

"You mean, you actually want me to . . . to . . ." He stopped talking abruptly, looked at the captain with narrowed eyes.

Nord knew the doctor did not wish to make him commit himself. He lifted his head, gaze steady and his voice was like the muffled roll of an organ. "Mercy," he said, "can only be the gift of the strong."

Stacker stood up, held out his hand. "Will you tell me when you've set the dead lights?"

Nord nodded. "I'll turn them on myself and call you." Abruptly shook hands.

"And the condemned, thanks to the psychopath, ate a hearty meal."

Nord realized the inevitableness of their situation. He had an evanescent desire to go to the brig ward and wreathe Bickford in a flame pistol but he realized even as he thought it, how stupid an act it would be. It would be like trying to take revenge on nature. The psychopath was nothing more or less than an evolutionary attempt to make men learn to use his brain for the benefit of others and not to live out a life of selfish purpose.

Their situation was a result of Bickford and he was a result of Man's groping attempts to use his mind. How little all that philosophy would help them now. Nord projected his mind ahead, saw himself at the last, coughing against the thin, lifeless air; he saw his crew looking at him with sightless, staring eyes as they slumped wearily down to die on the cold, metal deck.

He saw his ship, hurtling through space, taking a course tangent to Lanvin. The grim dead lights would shine on her bow, telling of their fate. The outer port would be open to make entrance by the investigating party an easy matter.

Some distant day, months, from now, they would board the ship, study the log, cremate their remains. They would cradle the ship, open the holds, remove the freight. New tractors would till Lanvin's fresh, fallow soil and earthly vegetables would grow there.

Their names would be engraved on a bronze plaque in company with thousands of other spacemen who had died, that men might see the stars and beyond. Even though they did die, they had made their little contribution to the cause of man. New things would grow in new places, other than that, man could have no object for his existence. New things to grow in new places.

Lanvin, Planet IV., Sun 3, Sirius System is a terrestriallike planet. It has three large continents and well over a million islands dot its shallow seas. It is a tourist's mecca, a farmer's paradise.

The Space Yard of the Force is located on Centralia, largest of the land masses. The commercial lines land on Desdrexia; they claim the climate is better there. Actually it is just as hot on either of the continents. But Mount Helithon is on Desdrexia. The sight of that seventy-five thousand meter mountain rising from the silky, sanded plain, its pinnacle shimmering like a crimson diamond, made too beautiful a picture for the teleposters. The commercial psychologists couldn't afford to pass it up.

Lanvin has no satellite so the quarantine station was located on Mount Helithon. Dr. Leland Donaldson, was Quarantine Officer for the Public Health Service. Because he passed pratique on commercial and government vessels he knew all officials of the big companies and the local brass hats of the service.

He called Admiral Gates, crusty com-

mandant of the yard, invited him to his lofty station for some beer. Not Lanvin's synthetic stuff, but real, old-fashioned beer from Earth.

The admiral looked over his foamy mug at the quarantine officer. His thick jaws crunched on a salt stick. His wrinkled eyes held a glitter like freshly cut steel. He liked Donaldson but sometimes he wondered if he didn't like his beer better.

"Has the *136* left yet?" Donaldson asked after their second stein.

"The *136,*" the admiral hesitated. "That's young Corbett's ship. They're Earthing tomorrow."

"Did you go aboard her?"

"Me? Go aboard her?" The admiral looked shocked. "Why should I? I have a staff to do that sort of thing you know. They brought out a lot of stuff for the Colonial Office. Tractors, you know, harrowers, things they use to make things grow in the ground, seeds and well, you know." He waved his stein about the room, slopping some of the beer on Donaldson's tesselated floor.

"Seeds," Donaldson started to laugh.

"Why laugh," Admiral Gates snorted testily. "One of my lieutenants went aboard, came back reporting the ship was spotless, decks like polished glass. Not even so much as a hull scratch. Outer skin a bit burned but perfectly normal. But perfectly normal you know. He said he left you one patient, chap by the name of Bickley or Bikeford or something. Civilian, politician. You know about that sort of thing. The lieutenant said, Corbett would go places in the Service, had fertile imagination, fertile, you know."

"Fertile," Donaldson chirped. "Then you don't know?"

"Then I don't know what?" Admiral Gates' eyes grew frosty. "Of course I don't know. How should I know? What should I know?"

Donaldson told him. "About a hundred days out from Earth, they were just reaching terminal velocity and their chlorophyl went sour and started to decay."

"No trouble there, ships always carry spare stuff. It's electron fever that gets me. Hate the stuff, you know, high speed, space free electrons going through the skin. It's bad." He shivered and rubbed the wrinkled, red skin of his face. His brows puckered and his lids closed to tiny slits. "Why did their chlorophyl go bad?"

"They had a psychopath aboard. A civilian who was placed in charge at the last minute to manage their air. Had a record of police arrests a mile long, family shipped him out here hoping he would turn over a new leaf or something." Donaldson snorted rudely, "as if a psychopath would. This guy got mad at the ship and all inside it and spit in their chlorophyl. It got infected but quick!"

"But they had spare stuff."

"They didn't though," Donaldson pointed out. "Bickford gave it all away. Traded it all for some tools or something to gain favor with some rich dododo. They were really in a spot."

"A psychopath aboard," the admiral shook his head. "That's bad. They're dangerous. They crawl into positions of responsibility and then when you need 'em they blow up, tear your ship to little meteors. Happens too often. The space surgeons should be more careful. They didn't have any spare chlorophyl you say. Their own lungs were going bad." He took a big swallow of beer. Then he exploded. "Then how in the name of Great Space did they get here?"

"Well," Donaldson spoke slowly, as if tasting every word. "Their stuff was decaying fast. They couldn't recharge their tanks. Asphyxiation was shaking hands with the boys. The space surgeon was set to make things easy at the end with poison in the food or something. Then the skipper's fertile imagination comes through with a roar."

"Don't say 'skipper,' " Admiral Gates interrupted petulantly, "hate the word. Makes me think of sail boats, sea and water, things like that, you know. Go ahead, tell the story," he wagged his finger, "but if Corbett has done something wrong, I want the report in writing and officially and not over beer."

"Well, the captain," Donaldson said in an annoyed tone, "got together with Stacker the ship's space surgeon and they put half their crew to sleep with narcotol, left them that way for weeks I guess. Cut down oxygen expenditure, you see."

"And," Admiral Gates shouted.

"The rest of them turned gardner."

"What! You said gardner!"

"They turned gardners but big. They pulled their sewage tanks, dried the stuff in the ship's ovens, spread the slew over the recreation deck. They rigged actinic generators over that, shunted their venous air straight through that room

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TIME TO DIE

By MURRAY LEINSTER

Repentance for sin was a silly sort of thing, he figured; he was sorry only for his errors that led to detection. And the time-formula that allowed him to go back and fix that up made everything safe—

RODNEY sat on the cot in his cell and stared at a white-hot splash of sunlight shining straight down on the stone floor between the death cells. He was literally dazed. But gradually the news his lawyers had sent him fought itself to the status of a fact. There would be no second reprieve. There would be no commutation. In spite of his standing as having one of the four best brains in the country, in spite of his reputation as possibly the most competent physicist alive, he was going to be executed like a common felon for a commonplace murder. His lawyers could do no more. In exactly three days, prison guards would come and shave his head and slit his trouser legs, and then march him down the corridor to the little green door at its end, and they would take him through it into a room in which there was a squat and ugly and quite horrible chair. They would strap him in that chair and put wetted electrodes to his flesh, and a white-faced man would throw a switch, and Rodney's body, already dead, would struggle convulsively against its doom—

He cracked, suddenly. His flesh crawled as if every separate cell of his body raised a frightened clamor against its coming dissolution. His bones turned to water. His throat was suddenly dusty-dry. He found his hands clawing aimlessly. He heard himself making noises. They were partly gasps and partly sobs and partly self-stifled screams of terror.

He heard the sounds, and he felt contempt for himself. But he could not stop. His body made shaking, convulsive movements. Great tears poured from his wide-opened eyes, empty of everything but pure animal panic. The noises grew louder. Presently he would be screaming. And, if the doctor did not come in time; if somehow he could conceal his state until no dosage of drugs could ease it, he would be quite mad and then they would not execute him. He would live—

Then there was a noise somewhere close by. It was merely the creaking of springs on the cot in the other death cell, now inhabited by one Limpy Gossett. But Limpy was listening. He was a murderer, too. He had been condemned a second time for his second murder. He was to follow Rodney through the door at the end of the corridor. They had talked often, in the past few weeks, and Rodney felt an illimitable contempt for his fellow criminal. But pride forbade that he let Limpy hear him.

Limpy's voice came, reverberating endlessly against the stone walls and iron bars and iron rafters and roof of the deathhouse.

"It got you, guy?"

Rodney would have welcomed madness, because it would have kept his body alive. But Limpy was a mere professional criminal. His two murders had been incidental to his profession of burglary. His brain hardly rated above a moron's classification. So Rodney clamped his lips shut and fought desperately for composure. After seconds he said, as if drowsily:

"What's that? Limpy, did you say something?"

"Yeah," said the reverberating voice. Limpy was invisible. Rodney had never seen him. But his voice was deep bass, and the echoes in the deathhouse gave it an awesome quality which no amount of bad grammar could quite take away. "I asked did it get you. I heard you makin' noises."

Rodney stirred on his cot. He feigned a yawn.

"I had a nightmare," he said. "A cyclotron sprouted arms and legs and went racing through the lab—"

His own voice echoed, but it would not have the quality of Limpy's. He waited, his hands clenched.

"To bad," rumbled the unseen Limpy. "You only got three days, guy. Three days an' they march you through the little green door. I got somethin' to tell you when you crack up. It'll help. Let go, fella. What you hangin' on for?"

"Why should I crack up?" demanded Rodney.

"Because," said the booming voice, "you got a chance then. I get one too—

maybe. There's a trick y'can work. I can't, but I seen it work once. If I seen it again, maybe I'd get the trick of it."

Rodney, wetting his lips, said skeptically:

"Escape, eh?"

"Yeah," said the invisible voice. "From the deathhouse. I seen a fella named Fellenden do it. Ever hear of him?"

"Not likely," said Rodney. He despised Limpy and all he stood for. He, Rodney, was another order of human being entirely. He— But then he said sharply: "Fellenden? You mean the chap who worked out the indeterminacy field for electron telescopes?"

Silence, as if the unseen Limpy had shrugged. But his bass voice, echoing, said:

"I wouldn't know. He bumped his wife. He was gonna get the hot seat. We was in the deathhouse at Joliet together. He got away. Skipped. Blew. They never knew how he done it. *I* couldn't. But I got a commutation later on, an' after, I got out. Remember him?"

Rodney said suddenly:

"That's right! Fellenden did kill his wife! He left a lot of work undone, and some of it nobody could quite carry on—"

"O.K.," said the rumbling voice. "That's the guy, I guess. We used to talk, same as you an' me. He was workin' on a idea to get away. He told me. 'Helped to talk things out,' he said. It was a trick to get away clean. When you crack up, maybe you can do it, an' maybe you can explain it to me first. Let go, fella!"

The patch of sunlight shone white-hot. For an hour every day it shone into the deathhouse. Its reflection was a soft bright glow which should have been beautiful—but there can be no beauty in twin rows of death cells.

Rodney swallowed. His throat was still dry.

"Why wait?" he asked, with an effect of cynicism. "If it needs desperation, I'm all set now! What've I got to lose beyond a couple of days of waiting?"

His voice sounded all right, but he was shaking all over. He stared through tool-steel bars across the corridor with its spot of sunshine, and into the depths of another cell just like his own, but untenanted.

"Fellenden said," said Limpy, "that a fella hangin' on couldn't work it. A guy's got to use all his brains. If he's defiant, an' clingin' to excuses for what he done, an' insistin' he hadda right to or hangin' on to hope, that's part of his brain that won't work free. A fella's got to be cracked up or else plenty sorry so he don't care what part of his brain gets stirred up."

Rodney said skeptically:

"Ah! No suppressions. No memory blocks. If that means no inhibitions, I qualify! But what's this, Limpy? Self-hypnosis?"

Limpy's voice rolled, and yet was casual .

"He called it time-travelin'."

Rodney stiffened. But that was nonsense! Fellenden hadn't accomplished time travel! He'd devised a field of quite ridiculous simplicity which eliminated the indeterminacy factor that had made electron telescopes impossible. There would be no electron telescopes but for Fellenden. It was true that there was still controversy over how his field worked. Nobody knew what his theory had been. It was known only that the field worked. But time travel—

"That's crazy," jeered Rodney. "How'd he do it? But it's impossible!"

Again there was a pause as if Limpy shrugged.

"He said we do it all the time. We used to be in yesterday. After a while we'll be in tomorrow. Like bein' on a train that a while back was in a jerkwater town named Tuesday, an'll reach a town named Wednesday presently. That's time travel!"

Rodney laughed shortly, but with a catch in his breath.

"Tell me about his escape," he commanded.

Limpy's voice rolled in every crack and cranny of the deathhouse. After every word there was a whispering echo that lingered with a queerly solemn persistency.

"The night he left," the voice said quietly, "he grinned at the guard when he was makin' last inspection. 'I'm escapin' tonight Clancy' he says. An' the guard says, "Says you!' An' Fellenden says, 'That's right. Better tell the warden, or you'll catch hell when I turn up missin'.' Clancy did. That guy Fellenden was smart. They knew it. They come an' turned his cell inside out. They stripped him an' hunted over that place like nobody's business. They didn't find anything. Natural! An' Fellenden says, 'I'm glad you did this, Warden. You'll feel better for havin' done it.' The warden says, sour, 'I'll see you in the mornin'!' But Fullenden says, 'Oh, no. I'll be gone.

I'd explain if I could, but you wouldn't believe it. Anyhow, you've been warned, an' you'll take all the precautions anybody could, so nobody can blame you. I like that,' says Fellenden. It was funny to hear him talk so quiet an' confident!"

Rodney listened tensely. This was insane, but his body still felt sick and weak with purely physical revulsion against extinction.

"Go on!" said Rodney challengingly.

"The warden says, ironic, 'You takin' Limpy?' an' Fallenden says, 'I would if I could, Warden. I'd help everybody escape if I could—an' so would you, if you could help 'em escape my way. But everybody has to do it for himself.' The warden grunted. He didn't feel easy. Fellenden didn't sound crazy. He wasn't."

Silence, while echoes lingered. Rodney licked his lips.

"In the middle of the night," Limpy went on, "the guard come in an' looked in Fellenden's cell. I was awake. I hadda reason. I heard Fellenden say, 'Good-bye, Clancy. I won't be here when you come back,' Clancy says, 'I think you will.' Him an' Fellenden laughed together. Me, I sweated. I knew what Fellenden was gonna try. After Clancy went out, he says, 'I'm startin', Limpy. You try an' make it too. Don't talk to me now.' Then it got still. It was so still that I could hear Fellenden breathin'. He breathed quiet an' steady, quiet an' steady— An' then I didn't hear him breathin' any more. Guy, sweat come out on me in gallons! Next time the guard come through he looked in Fellenden's cell. He jumped a foot. He threw his light in there. Then he yelled. Fellenden was gone. Gone complete. They never found hide nor hair of him. They never even found out how he done it. He was just plain gone!"

There were little dust motes dancing in the shaft of sunlight that came down from overhead. It had moved perceptibly. Rodney said:

"How'd he get out?"

"He didn't," said Limpy's voice. "Not out. He got back."

"To where?" jeered Rodney.

"You shouldda asked when," said Limpy. He sounded discouraged. "I shouldn't ha' told you, guy, until you cracked an' were ready to believe. But he went back to the time when he killed his wife. An' then he didn't kill her. He'd found out he was wrong, anyways. So he didn't kill her—an' so he wasn't in the deathhouse for it."

Rodney swallowed. His eyes fell on the note his lawyers had sent him. They'd done everything that the law or their ingenuity could suggest, and they couldn't do any more. There wasn't any more to do. The sight of that message sent gibbering panic to work at his temples again. But Limpy would hear him. He clenched his hands.

"Why didn't you pull the same trick?" he asked sardonically.

"I tried," said Limpy. His voice was flat. "I tried hard. I'm still tryin' Sometimes I think I'm gonna get it, an' sometimes it seems just crazy. But Fellenden done it. If you could do it, maybe—"

Rodney stood by the bars of his cell. The patch of sunlight was almost near enough for him to reach out his hands and touch it. Presently he would put his hands in it, and feel the warmth of sunshine on his skin. But his hands were shaking.

"It's branching time tracks," said Rodney, scornfully. "That's the idea! There can be more than one past, and more than one present, and more than one future. An old speculation. You do something, and it sets you on one time track rather than another. If you could go back, you could do something else and get on another time track. That's what Fellenden was talking about."

"Yeah," said Limpy tiredly. His voice rolled like the voice of a preacher Rodney had heard once as a child. But his voice was weary. "Sure! He told me that. You get on a train, he says. It's travelin' through time. Past a town named Monday, an' then past one named Tuesday, an' Wednesday, an' so on. Every so often you change trains. When you get on the wrong train it's bad. He'd got on the wrong train. Fellenden says, when he killed his wife. He hadda go back an' get on the right one. An' he did. But I ain't been able to. I was hopin' maybe—"

Rodney said with a savage humor:

"There's no reason why not! The theory's there. In a multidimensional universe, anything imaginable not only could happen, but necessarily must! So Fellenden could, in theory, do what you say he did. The trouble would be that he was on the wrong train. His problem was to get off. How'd he do it? I'm on a train I'd like to get off!"

Suddenly his throat was dry for a new reason. He listened with a desperate intentness for Limpy's answer. The shaft of sunlight was close enough, now, for him to reach, but he did not put out his hands. He licked his lips.

"I said the theory's all right, Limpy! How'd Fellenden do it?"

Limpy said heavily:

"That's where I'm mixed up. You're on a train, he says. It's moving through time. Before you can go back you got to slow up. But the train won't slow. You see a station slidin' by—Wednesday maybe—an' you wanna go back. You got on the wrong train Tuesday. Desperate, you start runnin' for the back of the train. At first you don't see no difference. But you keep runnin'. Presently the station ain't goin' past you quite so fast. Then you run harder. You hold it even, running with all you got. An' all of a sudden you get to the back of the train. The door's open. You jump down to the tracks, an' don't get hurt because you're runnin' back as fast as the train runs ahead. An' then you go high-tailin' it back along the railroad track to where you got on the wrong train. An' the right one's there—"

"It hasn't left?" asked Rodney, cynically.

"No," said Limpy flatly. "I dunno why, but Fellenden said no."

Rodney's pose of cynicism dropped away. Limpy could not possibly have worked out a theory like this. Fellenden must have worked it out, and phrased it carefully in such homely terms for Limpy's untutored understanding. It was pure logic on a familiar foundation of speculation. You did something, and it had evil consequences. You went back in time, before the event which had the evil consequences. You avoided that event. Then, necessarily, you took a branching time track. You went into another of the innumerable futures which at that point in time were possible for you. The evil consequences of the event you avoided could not be in those other time tracks. And you would cease to exist in the first time track at the point where you turned about and went back.

Granted the fact of time travel in this way, which was the only possible way in which time travel could take place, it was sound! Limpy could not have imagined it. Someone of the caliber of Fellenden must have devised it. And Fellenden had made that indeterminacy field, which nobody else yet surely understood—

Rodney licked his lips. It was the answer, if he could get it—and he had one of the four best brains in the country. But it was enraging that he'd had to be instructed by a common criminal like Limpy!

"I've got it," said Rodney curtly. "I see the idea."

There was a clanking of the outer doors of the death-cell house. A guard came in. He gave the two prisoners their food. Rodney regarded him with the burning eyes of hatred, in silence. The guard went out.

Rodney heard the sounds of Limpy, feeding. Himself, he could not eat. He had three days to live—if he did not solve the problem of time travel as Fellenden had solved it. He could believe in the theory, now. If he did not believe, he would go mad! But besides that, there was evidence that it could be done! Fellenden had done it!

He paced up and down his cell. Time travel. Fellenden had vanished from a death cell in Joliet by traveling back to the time before the killing of his wife. Then he had not killed her. There had been at least two possible futures for him at that point; in one of which he killed her, and in one of which he did not. Rodney lived and moved in the future in which the murder had taken place. In the other—which to Fellenden was now the actual future—Fellenden had not committed a murder, and was doubtless a respected citizen and a prominent physicist instead of an escaped murderer. That other time track was like but not the same as this. It was possible to get into that other time track. Fellenden had done it! Galileo heard that a telescope had been invented, and took thought on the principles of optics, and made a telescope in some ways superior to the original. He, Rodney, now knew that time travel was possible, and he had one of he four best brains—

Time passed. Sweat came out on his forehead. Escape to a parallel time track would be escape of unparalleled completeness. One would have nothing to fear. The very cause of one's fear would no longer be real. Not only the penalty, but the event which called for penalty could be wiped out. But there must be a starting point.

He forgot to put his hands into the slender shaft of sunlight. The sunlight died, and he did not notice it. He paced his cell. Three paces this way. Three paces that. A starting point— A starting point—

It grew dark. Rodney was tense and growing desperate. It was possible! The theory of parallel time tracks was almost orthodox! And Fellenden had proved its verity! But how? Given the beginning, Rodney knew he could go on. Given the principle by which experiment could be made, he could envision every detail that experiment should uncover. But he could

not devise a beginning for experiment! He was like someone dying of cold with a fire ready laid but lacking a match, and not knowing how to make a fire drill to produce a spark. It grew maddening!

Night had long fallen when he said sharply into the blackness:

"Limpy!"

He heard Limpy stir.

"Yeah?"

"I've got it," said Rodney, harshly. "But I'm curious about Fellenden. Tell me how he started to work. I want to see if I've got a better way than he had?"

Limpy's voice rolled sonorously among the unseen walls.

"You' lyin', guy. A fella who got that trick would want to tell everybody who'd listen."

Rodney could not imagine it. He snarled:

"Altruism, eh? A part of it is to be kind and good?"

"No!" Limp spat. Rodney heard him. "Just—you can't take baggage. Fellenden said so. He said 'we got all kinda anchors to this time track we're in—we're hitched tight to the train we're on. We got to cut those bonds loose first. We can't hang on to anything in this time track. It's gonna be imaginary presently. We gotta not care about it any more'n something that's imaginary now. Like"—Limpy's voice was unresentful—"like you gotta get rid of feelin' proud you got more brains than me. That ties you to me. I'm in this time track. You wanna leave it. You gotta let go of me. I ain't on the train you wanna get!"

In the darkness, Rodney seethed even as this fitted into the pattern of logic. There was a patch of moonlight on the wall above the opposite cell tier. It was the only light anywhere. Limpy's voice rolled on drearily:

"I guess it's no go, guy. I gave you just about all the stuff Fellenden told me. If you can't make it work—" Then Limpy said dubiously, "There's just one other thing he kinda harped on. He says, how do we know we're on this time track anyhow? How'd we know if we got on another one? What's the difference between 'em, to us? How do we know time's passin'? How do we know we're travelin' in time, anyhow? Does that make sense?"

Rodney's throat hurt when he swallowed.

"B-bishop Berkeley!" he said hoarsely. "I see and hear and feel the place I'm in. Therefore it is real to me. What I experience is real, to me. What I do not experience—"

Then he cried out. He found himself clutching the bars of his cell. His voice babbled in triumph:

"That's it! That's how you slow yourself in time! Listen! When you listen to a clock tick, seconds are long! When you notice things between the tickings, they're longer! If you speed up your perceptions by noting ever more trivial things, you slow your rate of travel in time! That's the first step!"

His own voice echoed and re-echoed in the darkness. The little patch of moonlight was very sharp and very clear. It was inches from the top of the cell door opposite him. He said exultantly:

"Then you break away from current time entirely. Reality is real because it matters. You've got to push away the mattering of everything in the present. A thing which has no sensible effect has no sensible existence. When you shear away every anchor to the present, you're leaving all baggage behind. In effect, you run to the back of the train, empty-handed and unhindered. When you slow down time and cut every tie with the present, you get ready to jump, to leave —And then you'll be able to change your memory of an event a half-second ago to a perception of an event a half-second ago. And when you've done that, you've won! You've started to travel back in time!"

He shook the bars of his cell, crying exultantly into the darkness. This was logic! This was reason! This was infallibly the experimental method he'd needed! His eyes gleamed.

Limpy's voice came quietly:

"An' then what, guy?"

"Then," cried Rodney, in exultation, "when you're no longer anchored to the present by clinging to it, you go back to the last thing you do cling to! You'll have to pick it out before you start! You won't have a chance on the way! You'll think of the moment before you —took the wrong train! You'll stop there! You'll have a chance to take the right train, if you're quick! And then . . . then you'll come back to present parallel time, to this day and hour, but in an alternative existence resulting from the different course you took! Another time track, Limpy! And that's where I'm going to go!"

A long silence. Then Limpy's voice, rumbling soberly in the blackness.

"Yeah . . . I see. Cut loose from now. From everything since the time you

wish you'd done different— Yeah! That's it! I didn't realize. I got some cash cached away— All the time I' been tryin' this, I been rememberin' that cache as a stake for me to get started on again. But if I go back to where I gotta go, that stuff won't be on the track my train'll be travelin' on. I got it now—"

Rodney's hands closed tightly on the bars of his cell. He stared at the slowly creeping patch of moonlight. With a fierce satisfaction he listened to his own breathing, noting differences in every breath. He listened, in the monstrous stillness of the deathhouse, to the beating of his own heart.

Limpy's voice came; very grave and very sober.

"I got to go a long way back. To when I was a kid, I guess. Yeah . . . a long way. All the way!"

Silence. Rodney summoned all the resources of his brain. There were not many brains as good or as disciplined. He knew, and reveled in the knowledge, that all the events that had happened as the consequence of a certain specific instant would soon be unreal. They would be in another time track. They would be might-have-beens, to which no bond could fasten him. Knowing of their coming unreality, he could renounce them. They no longer mattered. They were merely imaginings which would presently have no meaning, and therefore had no meaning now. He viewed them with increasing remoteness, listening to his own breathing and his own heartbeat; watching the creeping patch of moonlight on the wall.

Time slowed. There were intervals between his heartbeats. There were pauses between his breaths. He could distinguish different parts of the heartbeat cycle. He could distinguish parts of the parts— The patch of moonlight ceased to move.

It did not move! There were monstrous intervals between his heartbeats. Triumph filled him. The last instant that counted in his scheme of things was enormously vivid. Nothing was important but that. He clung to the thought of it with a fierce intensity, picturing vividly every detail of it.

The moonlight patch receded a little. It moved with a vast deliberation—backward! Its rate of movement—backward —increased with a smooth acceleration.

Suddenly there was confusion which was not confusion, and chaos was not chaos at all. It was night and it was day and it was day again. He moved here and there without volition and without effort, like a weightless object upon an insanely charted course at dizzying speed. He was like a phantom on the screen, movable at incredible rates without resistance. Days and nights went by. He flashed through elaborate evolutions with effortless, infinite speed—backward. His speed increased. He could perceive only in flashes. An instant in a car in the open. The car backed with incredible speed. An instant in the courtroom. He was on trial. Flashes of infinitesimal duration before that and before that and before that—

The confusion and the chaos ended suddenly. He was in the room where Professor Adner Hale lay dead. He, Rodney, had committed the murder in the one fashion no one would possibly associate with him. He had done it with insensate, maniacal violence. It seemed the deed of a brutish and almost mindless fiend. It was inconceivable that one of the best brains in the country should have directed senseless, flailing blows which had continued long after Professor Adner Hale was dead. It was a perfect alibi.

And this was the instant when he had made his mistake. He surveyed the blood-spattered, violence-smashed room. He saw a chair which was not overturned in the simulated struggle. He regarded it with satisfaction.

Before, he had toppled it over, without noticing that under it lay the poker with which Professor Hale had been beaten to death. That had been his mistake. It proved that the chair had not been knocked over in Professor Hale's death struggle. It proved that the effect of mania was the result of calculation. It set the police to work to discover, not a maniac but a coldly functioning brain which had duplicated in every detail but that one the working of a homicidal maniac's frenzy. That one small flaw had led to the discovery of clue after clue and the condemnation of the country's greatest physicist to death. But—

Now he laid the chair gently on its side. The poker was *not* under it, now. He pulled gently at a chair leg to bring the poker more plainly into view. Now there was nothing but the handiwork of madness.

He laughed softly. One of the four best brains in the country. He'd been overconfident. That was all. Now this small blunder was corrected. He would go into another time track. The discovery

Professor Adner Hale had helped with —on the drudgery only, of course—and which he insisted must be published for all the world to know, would not be published now. With it as his secret, in the time track into which he would now move.

He felt his return to attained time begin. Time moved swiftly. It was dawn, and he was somewhere else. It was night, and he was in another place. Dawn and midday and night. His body whirled here and there and everywhere, without resistance. There was confusion which was not confusion and chaos which was not chaotic at all. While his body whirled frenziedly through the sequence of events which lay between the significant moment and the instant from which he had traveled back—but now he moved in another time track entirely—his mind was calmly exultant. He was in the midst of crowds, and in solitude. He was in a room which flickered like a kaleidoscope —which was a courtroom. There was an instant when he was in a car being driven somewhere. He passed through months in flashes of infinitely short duration. Then—

Time steadied. All was normal again. He was in a cell. In a death cell. It was not the cell he had occupied before, but the deathhouse was the same. It was dawn, and a gray light came in the skylight high overhead. He wore prison garb —but not the same garments he had worn before. The stenciled numbers were different. He was in a different time track, but he was in a death cell.

There were clankings. Footsteps. Three guards and a trusty appeared before his cell. The trusty, twitching, carried a basin of water and safety razor and a pair of shears. He was to shave Rodney's temples and slit his trouser legs for the convenience of those who would presently —today—take him through that green door and strap him in that horrible squat chair, in which after a little his body—already dead — would struggle convulsively against its doom. . . .

He was paralyzed. He could not move. The door of his cell opened. They came in. He could not stir. He barely breathed. He was almost in a coma of pure, incredulous horror.

One of the guards handed him a note.

"Professor Fellenden," he said curtly, "you know, the fella who fought so hard for you, got permission to send you this."

Rodney breathed hoarsely. It was almost impossible to move. For an instant he seemed unconscious of the offered message. Then one of the guards stirred, and he snatched it. They would wait while he read it— They would wait that long. No longer—

His eyes were hard to focus. Almost he did not try to read but only to delay, to gain precious seconds of life. But then he saw an equation, and he reacted with a stunned swiftness. And Fellenden had written down for him, in concise equations and precise, scientific phrasing, the theory of time travel with such absolute clarity that a trained brain could grasp it in a single reading. On the very brink of execution, a scientific mind could comprehend and use this, and escape death by the simple process of going back in time and—not committing murder. But nothing else would suffice. He must not commit murder!

Rodney shifted his eyes and stared unseeingly at the opposite wall. So that was it! He'd been wrong, not in a trivial detail of a murder, but in a basic fact. Execution was a consequence of murder, not of a fumbled clue. And Fellenden, who'd been a murderer himself, had to tell him so with pious urgency! Rodney raged coldly. Very well, he'd go back again! Not to a moment just after he'd murdered Hale, but to a time long before! Before Hale had found out anything for which he would need to be murdered.

The guards lifted him to his feet and bound his hands behind him. He was very calm, now. Ragingly calm. With the clarity of conception that Fellenden had made possible, he knew that it would be infinitely easy to escape. Even in the chair itself. With his brains—

He said scornfully:

"Just for curiosity, I'd like to know what set the police on my trail after the murder. Something trivial—but I've forgotten."

A guard said awkwardly:

"You laid down a chair to look like it'd been knocked over. You pulled it where you wanted it by one leg. The cops knew it wasn't knocked over because a loose cushion didn't fall out. An'—your fingerprints were on the leg you pulled it by."

Rodney shrugged. Proof enough. He'd have to go back beyond the murder and not commit it. Too bad! Professor Adner Hale had been a righteous old fool whom it had been a positive pleasure to bludgeon to death. Now he'd have to live in a third time track—

The guards led him out of his cell. He said harshly:

"I'd like to tell Limpy something." When they stared at him, he said impatiently: "Limpy Gossett! In the death-house, here! I was given a reprieve so it'd be a double execution."

One of the guards said:

"You didn't get a reprieve, fella. An' there ain't any Limpy Gossett here. Never was. I never heard of 'im."

The green door opened. Rodney was badly shaken, now. Still, he had only to go back in time. But he gave a precious half-second to a raging hatred of Fellenden, who had written piety in with science in his instructions for Rodney's escape. "The important thing," said Fellenden fatuously, "was to be rid of all ties to the time track you wanted to leave. Everything in it had not to matter to you—" Rodney despised him.

There was the squat and horrible chair. Rodney began to listen to his own breathing. To his own heartbeat. Step by step, they marched him to the chair. Slow down time! Slow it! Watch everything! Cut the things that anchor you to this time track! With that and Fellenden's equations it's easy—but Fellenden's a pious fool!

Time did not slow. He realized it in a surge of panic as they strapped him in the chair. Then he knew why. Fellenden held him in this time track! Fellenden mattered! The fact that he had escaped to here! The equations and the explanation he'd given Rodney could not dismiss them as meaningless! He hated Fellenden with a terrible, despairing hatred. But he had to stop hating him and put all his mind on slowing time—

He fought to achieve it with all the strength of one of the four best brains in the country. He was trying when they drew back from the chair and waited, white-faced, for the switch to be thrown.

He sobbed, then. But he was still trying when—

COMMAND

(*Continued from page* 56)

and planted seeds in their synthetic ground. They had hydroponic gardens all over the ship."

"Would it grow fast enough to convert carbon dioxide to oxygen?"

"Well it did," the port doctor said succinctly. "They were having fresh, green vegetables from their own garden by the time they planted at quarantine."

The wrinkles around the admiral's eyes unfolded. "Maybe it's a good thing to have a psychopath aboard, keeps a guy on his toes, you know. Corbett claimed a five-hour delay over Central Sea after leaving quarantine wash. Wanted to empty and clean ship. Makes him a better captain. Yep it's a good thing—"

"It's a good thing he did have a fertile imagination, or else you would be writing letters to his family."

Lieutenant Nord Corbett stood at attention before the blue-iced eyes of the admiral. Through the port behind the commandant he could see his cradled ship. The ground crew had finished the hull polish and in the glare from Lanvin's hot, white sun it glittered like a platinum flame.

"May I have my clearance for Earth, sir?"

The admiral's bushy brows furrowed. "Ready to blow; taking back fifty passengers, you know. Got plenty of water and air?" He rumbled. "Checking them all in?"

"Yes, sir." Nord's face crimsoned under the icy stare of the admiral. "They're all checked. Dr. Stacker, my space surgeon, is giving them psychophysicals now."

"Civilians, too," the commandant frowned, "against regulations, you know."

"Purely caution against infectious disease, sir. The doctor requested it, and I do not argue with the medical officer of the ship. His duty is to prevent illness and—"

"Good idea, you know. Prevents dangerous guys aboard, too."

"I'm ready to drop my ground tackle, float free and blow," Nord said stiffly.

"Glad to hear you youngsters like space so well. No hazard at all now. Was a time it was dangerous. Astrogation was bad, air management poor, crew went crazy being cooped up so long. Purely routine now, purely routine spacing." His eyes took on a knowing glitter. "Did you have a good trip out?" He asked. "Experience any difficulty?"

"No, sir." He said it very stiffly, eyes directly at the admiral. "Usual sort of trip. Little trouble with the air about halfway out, but on the whole a rather boring trip."

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