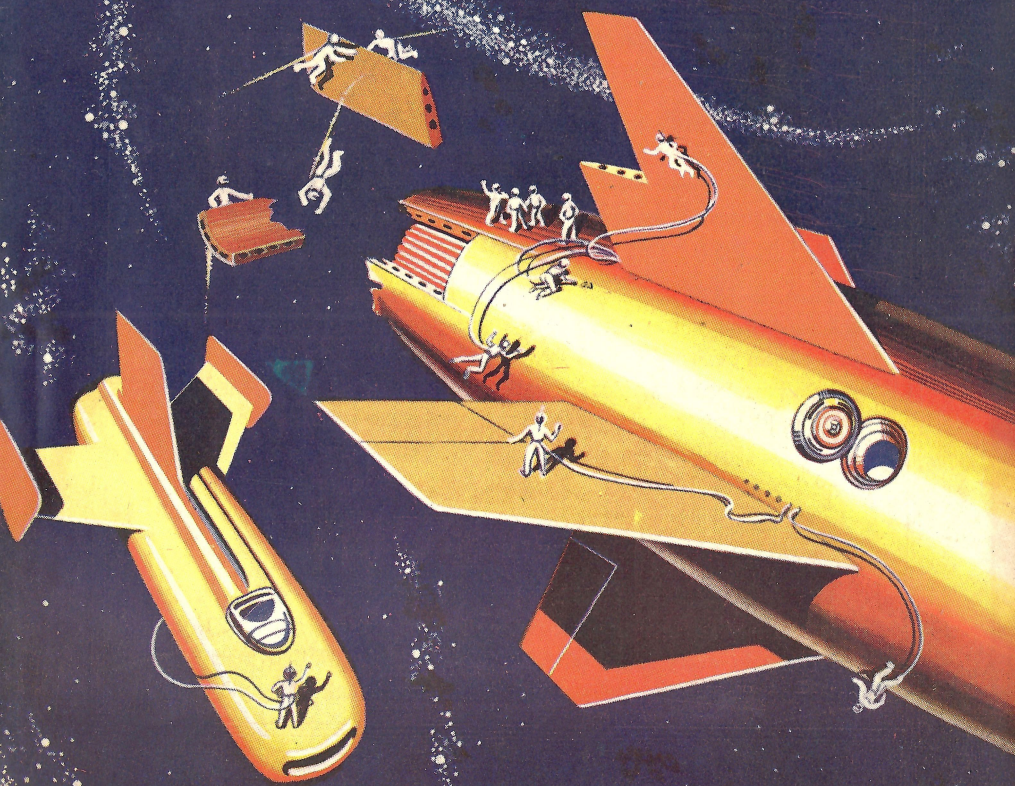


NEW WORLDS SCIENCE FICTION

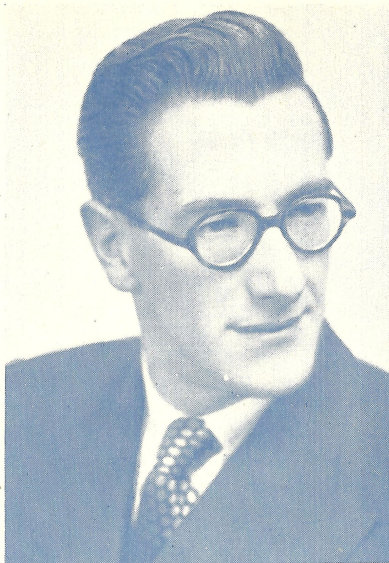
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E. C. Tubb

1919—



Born under the sign of Aries the Ram, six-foot saturnine Ted Tubb has been "battering" his way into British science-fiction circles since his first acceptance with "No Short Cuts" in *New Worlds* No. 10—with ever-increasing success.

A Londoner with a delightfully caustic sense of humour, he has been reading science-fiction as long as he can remember, having started with various boys' papers and then gone on to pre-war copies of *Astounding*. "Lurid and crude though most of these magazines were," he says, "they filled a much-needed want."

Then, in 1938, he made contact with other interested readers of science-fiction and began to take a serious interest in writing. "My first efforts were written for my own pleasure," he states, "and they are now perfect examples of what not to do, for I soon found that writing, like anything else worth doing well, requires a certain amount of skill. However, encouraged by my first acceptance, plus constructive editorial advice, I have now written and sold several hundred thousand words of science-fiction—though I have not yet fulfilled my ambition of writing *The Story*."

His present plans include several pocketbook novels, further tilts at the American market (where he has not yet appeared), and "a story in every issue of *New Worlds*." A printing machinery salesman, Ted's ultimate goal is to swing over to full-time authorship.

NEW WORLDS SCIENCE FICTION

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Unknown to Earth the Galaxy was policed by a dominant race who, from time to time, Cleared alien worlds for their own colonisation schemes. The method was to sow a virulent plague, then wait for the inhabitants to die off. Earth didn't stand a chance.

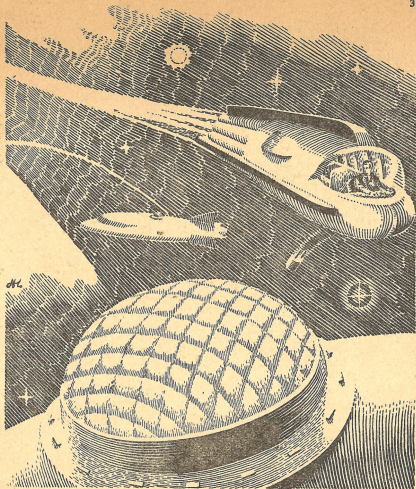
THE EXTERMINATORS

By **PETER HAWKINS**

Illustrated by **HUNTER**

Mike Yerrall looked back across the street at the cherry tree, strikingly similar to a domesticated tree of his own world, which blossomed in a front garden opposite and stabbed blindly at the keyhole with his key. Suddenly

NEW WORLDS



the key slipped into the lock; Yerrall twisted his wrist and opened the door, starting to whistle as he entered the boarding house. Hanging his hat on the hallstand he started to climb the stairs to his room, whistling loudly. As he placed his foot on the third step his landlady's worried face peered over the bannister rail of the floor above.

"Oh Mr. Yerrall! Please don't make too much noise . . ."

Yerrall stopped whistling and unconsciously dropped his voice to a whisper.

"What's the matter, Mrs. Hunt?"

"It's Marie; she's awfully sick. I've sent for the doctor but it'll be half an hour before he can come." She hesitated, a frown wrinkling her forehead. "I wonder, Mr. Yerrall—you're a Health Inspector at the Pile—maybe you could help . . ."

While she was speaking Yerrall had walked up the stairs.

"Certainly I'll have a look at her. What's the trouble?"

"We didn't take much notice at first. At lunchtime Marie complained of feeling sick so we didn't send her back to school this afternoon . . ."

Yerrall had heard sufficient.

"Just take me into her, will you?" he asked sharply.

Mrs. Hunt's eyes stared into his, bewilderment in their mild grey depths; Yerrall knew he had never spoken as incisively to her previously. His mind whispered, "They've started, and why in the devil's name did it have to be here?"

Steeling himself he walked into the small room in which Marie slept. The little girl lay on her bed, normally neat sun-gold hair laying in lank curls of dull yellow on the pillow, framing her agonised little face, now flushed a deep red, with a border of tarnished gilt. As he bent over her she seemed to sense his presence and opened her eyes.

"Lo, Uncle Mike," she whispered throatily. "I don't feel too good . . ." Her voice trailed away from a whisper to inaudibility.

"What is it, Mr Yerrall?" asked Marie's mother anxiously.

"I couldn't say," he replied trying and failing to force his eyes away from the flushed face. His earlier question repeated itself. Why did they have to start here, where he was observing? Why did they have to start above all on Marie, the tough little tomboy of a girl who had somehow quite stolen his heart? Maybe they knew he was getting fond, not only of individuals, but of this race as a whole which in not three Galactic Time Units had progressed from using beasts of burden to atomic piles. He could construe it as a not very subtle warning to him, but the race of which he was stock was neither soft nor subtle; those attributes were not ones which enabled any race to build up a Galactic empire.

To make his personal position more unbearable he had the necessary ingredients and apparatus in his laboratory at the Pile to manufacture the antidote for the plague his race was spreading on this world. Meanwhile he had to observe and chronicle the progress of the plague while it decimated Earth's population and eventually send back a signal to his superiors when he considered the planet could be taken over with no more than token opposition from the survivors.

He forced himself upright and glanced at Mrs. Hunt. Her anxious eyes met his with a question in their grey depths.

"I can't do anything," he said. "Wait until Doc. Robinson comes and if he needs any help I'll be pleased to give it. I'll be in my room."

Quickly he walked out of Marie's bedroom and mounted the stairs two at a time to his own room, racing thoughts keeping pace with his speed up the three flights. Before seventy two hours had elapsed the plague would be spreading from centres all over the globe; some ten per cent of the population would be immune and he, the chronicler, would be making out his reports. He, too, would be immune, but not naturally.

He thrust open the door and walked into his room, coming to an abrupt stop after taking two steps on the soft, deep-blue carpet, little icy prickles of fear jabbing his spine. Without waiting for instructions from his visitor he closed the door.

"Clearance has started, Yerrall," said the tall, frigid, too-neatly pinstripe-suited man who stared icily at him. "You know about it of course."

"I hadn't realised it until a couple of minutes ago . . ."

"Sit down, Yerrall." The visitor paused, reaching out to help himself to one of Yerrall's cigarettes. Carefully he lighted it.

"You won't know me, but I'll put you in the picture regarding myself. Your immediate superior was discovered two days ago to have laid on considerable supplies of the antidote to the plague; sufficient in fact to combat it on this world even after a couple of weeks activity. One of his secretaries discovered this; like a good Member of the Empire she reported it to us. We—ah—questioned your superior, psychological questioning of course, and the results revealed it was your reports which had thrown him slightly off balance. Er—I am Science Corps Police Inspector Drifeld, by the way. Do you wish to see my identification?"

"No, no," muttered Yerrall. "Nobody from this world would know or understand what you've just told me . . ."

"These reports, Yerrall, weren't your fault. Environment plays tricks on people. You've been alerted to your fault; it cost us a well-trained man, but we can make allowances for people on the spot. You are to carry on your work here; study the progress of the plague and report when you consider we can land forces and clear this world by mechanical means . . ."

"Is it necessary to clear this world?" snapped Yerrall.

Drifeld's eyebrows rose a trifle. "Clearance of worlds takes place for many reasons, Yerrall. I know nothing of why; my job is that of policeman." He paused, thin lips splitting into a smile. "In a way I'm very much like you; I observe and report . . ."

"In less than three GTU this world has come from nothing to the state of making attempts at interplanetary travel. It'll reach the planets . . ." protested Yerrall.

"I have no thoughts on matters like that; I am a policeman. I advise you, although it is not my business even to advise, to be like me and have no thoughts as to 'why?' Merely do your job as a Member of the Empire should and all will be well."

As Drifeld finished speaking a hand knocked timidly at Yerrall's door.

"You'd better go," suggested Drifeld, smiling again. "I shan't be here when you come back."

Obediently Yerrall rose and left his room; Mrs. Hunt waited nervously for him outside.

"Doctor Robinson is here, Mr. Yerrall. He knows you work at the Pile and wants your advice."

"I'll be glad to help if I can," replied Yerrall throatily, thanking all his gods Mrs. Hunt was too occupied with her own worries to notice the tension in his voice. In silence she led him nervously to her daughter's room.

"Doctor, this is Mr. Yerrall. He may be able to help . . ."

"Let him come in; we'd like to be alone then," rapped the plump, grey-haired and red-faced figure standing beside Marie's bed.

"Is there . . .?" began Mrs. Hunt.

"We'll call if we need anything," interrupted Robinson brusquely. With another worried glance at the child Mrs. Hunt moved aside to allow Yerrall to enter the room. Softly the door closed behind him.

Abruptly Robinson turned to face Yerrall; he noticed the doctor's eyes

were a golden-brown.

"Any ideas?" Robinson asked, pulling a pair of thick-lensed spectacles from his breast pocket and placing them on his nose. "Anything radioactive I mean?" he qualified.

"I don't think so. How could a child at school get hold of 'hot' stuff? If it had been a boy and a couple of years older I'd be suspicious he'd managed to get to the waste pits at the Pile, but a girl—no."

Robinson's head bobbed up and down in agreement.

"I'll be quite frank," he admitted, "I've not the slightest idea what it is; what worries me is that it's the fourth case I've had to-day . . ."

The soft click of the door handle turning over made Yerrall look over his shoulder. As the door inched slowly open a pinstripe-suited arm, powerful fist holding a gun, appeared in the opening. Yerrall felt his mouth turn dry as Drifeld opened the door another couple of inches and pointed the blaster at him. Wild thoughts rushed through his head; of course he knew he wasn't indispensable, but . . . Anxiously he looked round for some object to use as a weapon, something to throw at Drifeld to put him off guard for just the slightest fraction of a second so he could dive in and at least die fighting . . .

A beam of orange-light lashed past him, ending in a flicker of flame as the cloth of Drifeld's suit burnt to a cinder. The Police Inspector's hold on his gun relaxed; it fell from his fingers to the floor as its owner disappeared.

"Get him in here!" snapped Robinson incisively, tucking his own blaster into his doctor's black bag. Immediately Yerrall opened the door wide but the Inspector had gone. Picking up Drifeld's gun and pocketing it, he closed the door and turned round.

"Who are you?" he asked Robinson.

The doctor chuckled. "Both of us are in a difficult position. Drifeld knew of my existence but he didn't know I was here. He came along to see you, did he?"

"Yes. He advised me not to think too much about why worlds are Cleared . . ."

"This was intended for you, then. I expect he called up his H.Q. and reported something you'd said. They told him to get rid of you before any dangerous action formed out of your dangerous ideas."

Marie moved suddenly, throwing her arms out of the restraining bed-clothes. Robinson felt her forehead and she whimpered.

"Poor kid," he murmured. "Yerrall, at present I can do nothing for her. I know you have access to a lot of gear at the Pile. Prepare details of the manufacturing process of the antidote for the plague and go along to your lab. and make some for this girl. Bring back as big a sample with you as you can . . ."

"You said just now you didn't know what the plague was . . ."

"Obviously I do," snapped Robinson, "but I have neither the apparatus nor the human contacts to help me prepare the antidote. I'll tell you who I am; I'm just a cog in a machine, the same as you are, but our machines represent different schools of thought. You represent the Empire; I am a member of the Underground. It's as simple as that, and I think you'll agree with me your life won't last very much longer when Drifeld's H.Q. find out

about him. You might as well come in with us; our organisation here has several hideaways where we vanish when people like Drifeld get to know of a group of us, but get hold of the antidote and manufacturing process as soon as possible—can you go back to the Pile this evening?"

"Yes . . ."

"Get along there immediately; I'll be at that address." Robinson slipped a card into Yerrall's hand.

"I'll get it as quickly as I can."

Yerrall left the house hurriedly, thankful Mrs. Hunt did not hear him leave Marie's room. He caught a bus at the top of the street, impatient with the driver as he stuck rigidly to schedule, and dismounted from the vehicle at the Pile just as darkness was falling.

Armed guards patrolled the high wire fence surrounding the Pile, stalking slowly in pairs along their beats beneath the intense glare of batteries of arc lights. Out of the cluster of buildings they guarded sprouted slim, high stacks, a thin feather of grey smoke from each of them tinged dull red by the aircraft warning light attached to the rim. A few lights shone in windows denoting late workers; most of the yellow rectangles were in Research block, but a few still glowed in Admin.

Yerrall walked past the scanner, halting the prescribed ten seconds while photoelectric eyes scanned him and metal teeth crunched the time he entered the gates on a card he placed in its mechanical mouth. He hurried along to Health section, switching on lights in the darkened building, and hurried up to his own small lab. Carefully he arranged an elementary laboratory version of the apparatus to prepare the antidote and set it in operation, eventually settling down in a chair to write out details of the process. In half an hour he had finished; a team of six competent technicians could easily build and operate a full scale plant from his plans.

He placed his pen in the holder and looked at the rig on the bench, asking himself why he was doing these things. Impatiently he thrust the disturbing thoughts out of his mind and walked over to the apparatus; no sign of activity enlivened it other than a constant dull orange glow emanating from the filaments of two valves.

Carefully Yerrall checked through his notes, ensuring he had made no mistake and walked over to the bench again. A grey mist had formed on the walls of the tiny tube at the end of the apparatus, clouding the glass slightly. While Yerrall watched the mist thickened and condensed into a grey liquid. Abruptly the reaction stopped with a bare quarter of an inch of the antidote in the tube. It wasn't much, but it was sufficient to immunise a couple of hundred people against the certain death of the plague.

Yerrall placed the tube in his pocket and left the lab, hurrying through the gates, impatiently working out how long he would have to wait for a bus back into town. No more than a couple of minutes, he reckoned, after which he would have to find where Robinson lived. He decided he knew the area only vaguely, and climbed aboard the bus, hardly noticing he was the only passenger.

The conductor, when he collected Yerrall's fare, asked.

"Heard about the queer illness there is going about?"

Yerrall tensed; the man could be in the service of the Empire.

"Yes," he admitted cautiously.

"Queer, isn't it? There's a feller across the street from me got it. Doctor can't do anything, doesn't know what it is and can't find it in any of his books. He. . ."

The conductor broke off as a flash of brilliant orange light flared across the sky. A tremendous explosion followed it, transmitted to Yerrall even through the vehicle's springing, the shock waves travelling through the ground and rocking the bus like swell pressing against a small boat.

Yerrall sprang to his feet as the driver halted the bus and darted between the seats behind the conductor. He heard the man shout:

"It's the Pile . . ."

Yerrall knew his exclamation wasn't entirely true; part of the Pile had undoubtedly gone sky-high and he hoped there hadn't been too many people in it. He realised, for the second time, the feeling of sympathy—perhaps affection was not too strong a word—for this race of people; if he were a true servant of the Empire he should have no thought for anything other than the Empire. Again he thrust the disturbing thoughts from his mind, promising himself he would attempt to rationalise them later.

He joined the driver and conductor standing on the kerb watching the spread of the orange flames. Alarm sirens whooped across the night, generating a queer sinking sensation in Yerrall's stomach. From the distance came the brazen clangour of fire-engine bells mingled with the incisive silver trill of ambulance gongs.

"What section is it?" asked the conductor.

"Health Section," muttered Yerrall. "I was in it less than ten minutes ago. Are you going back to town?"

As Yerrall re-entered the bus he glimpsed the conductor's compassionate glance. The man didn't speak to him again but watched the orange fire spreading as the bus drove off. Yerrall knew the explosion was no accident; there was material and to spare in the Health labs, which could cause any amount of damage, but safety precautions were such that there was no chance of it exploding.

Chance was not the solution, but Yerrall knew what was. Someone had found out about Drifeld, and the Science Corps Police were trying to pick up the vibrations of himself and Robinson with mechanical seekers. They'd traced him personally to the Health lab, the last place he had been for any length of time and had exploded it, anticipating him still being inside. From now on Yerrall knew he could expect no rest; sooner or later the Empire would track him down.

Yerrall dropped off the bus as near to Robinson's address as he could remember. It would not be policy to ask the conductor for information; circumstances were such that if any questions were asked he would certainly remember the rather sick-looking man who said he had been in the Health Section ten minutes before it exploded. Yerrall wanted to remain unidentified if possible.

He hurried through the deserted streets, hand occasionally patting his breast pocket to ensure the glass tube and the details of the process were still in his possession. There were no other pedestrians on the streets; the cold blue light of mercury vapour lamps suspended high above them pre-

vided more than sufficient illumination, lighting up and accentuating the emptiness of the roads. Yerrall knew where all the people were; they were looking in on the continuous report of the sequel to the explosion on television screens, oblivious of the fact that another world had prepared to wipe them out of existence.

Somewhere within him, and what its eventual outcome would be he did not know, a tremendous trouble was taking place. Since he had been observing, and this was the fourth world on which he had watched Clearance, there had been building up within him a desire to know whether Clearance in itself was right. The Empire said it was, and the Empire was his life—or had been until Robinson had shot at Drifeld with a blaster. Now the Empire was hunting him. That, too, was right; he had failed in the job for which he had been trained. So far, all the arguments were logical; the question now was—on whose authority did the Empire decide what was right and what was wrong?

The distant clanging of a fire-brigade bell reached his ears, unsettling his train of thought. He listened to the brazen clangour, realising the outbreak must have got beyond control of the fire-fighting equipment at the Pile and brigades were being called from town.

The noise grew louder, Yerrall realising the fire-engine was coming along behind him. He looked over his shoulder; in a moment the red vehicle screamed past him, men clinging to the escapes and adjusting their belts and clothing. A few doors and windows opened in the wake of the engine, closing again almost immediately.

Yerrall reached a street intersection and compared the name on the indicator with the card Robinson had given him; this was the street. Suddenly he realised the fire-engine's bell had ceased ringing and a cold grey hand grabbed at his stomach as he counted the houses down one side. Flames, orange-yellow tongues of destruction, began to appear from the windows of the house outside which the engine had stopped. It was the one noted on Robinson's card.

Yerrall patted his breast pocket again and walked swiftly back the way he had come. One thought was in his mind. Somehow Drifeld's organisation had picked up Robinson and done, on a smaller scale, the same thing it had hoped to do with himself. In his case it hadn't succeeded; it may not have succeeded either with Robinson but that was a detail Yerrall decided unsafe to ascertain at present. There would certainly be some Corps Police not very far away. He would have to try to trace Robinson through city records of medical practitioners—always assuming such information was available to the public.

Yerrall was uncertain of his next step. He had the antidote to the plague and the details of its preparation, but without answering a great number of awkward questions he had no idea to whom he could give them. Robinson was the one link he had with people who could help; no inhabitant of Earth would believe his story. Nonetheless Marie must have the antidote but his own room at Mrs Hunt's would certainly be guarded or booby-trapped; he would have to stay away from it. That meant he would be unable to get the hypodermic from his equipment.

He felt a smile broaden his face; a sterilised needle would perform the

task equally well. Just as long as there was some of the antidote in the blood stream it would react with other substances present and generate a toxin which would kill the germs of the plague. At least he could save little Marie from the certainty of a painful death.

After twenty minutes walk he found himself in the street where he lived.

Carefully he studied the approach to the house, seeing no signs of any Corps Police. They would be waiting behind curtained windows, the windows themselves slightly open, each policeman with an eager finger on a sensitive trigger.

Suddenly it seemed it was going to be impossible to enter the house; Yerrall halted a moment, immediately realising he had made a fatal mistake. The pavement beside him flamed into incandescence and blobs of red-hot stone burnt his trousers turn-up. With a sharp breath of pain as flame burnt through his sock to his skin, Yerrall turned and ran back into the safety of the street which crossed the one where he lodged.

He bent down and slapped sparks out of the smouldering cloth round his ankle. A brief examination of the burn showed it was nothing serious, merely a wound which would gradually be forgotten during the course of a day or two, but at present it hurt.

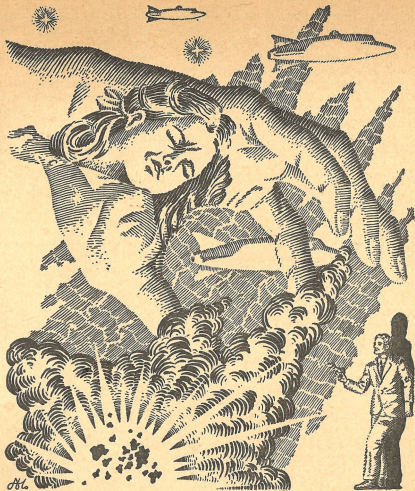
Yerrall made his way into the centre of town, searching for a restaurant. The evening was getting on; few establishments were still open and he had difficulty finding a place which seemed quite enough. He needed to think in peaceful, comfortable surroundings.

To a certain extent his mind had been made up for him. The Empire had no use for him except dead; that was all too plain. Therefore, although there was no reason why he should automatically ally himself with the Underground fighting the Empire, it was an idea which grew more attractive minute by minute. He could fight back with the knowledge there were forces which might be able to help him if he were in trouble and people who, although their plans for this world might not succeed, were fighting back against something—Clearance—which Yerrall decided he believed fundamentally wrong.

Yerrall realised suddenly he had rejected the Empire; no longer was it a part of his life. He was in possession of knowledge of vital importance to a small world over a hundred light-years to his own and one which, some day, he knew would conquer the starways the same way as his own race had done. The grim thought that Man's idea of expansion would also embrace Clearance crossed his mind; that was a long way in the future and he doubted if he'd live to those distant times.

The lights of a restaurant he had visited once or twice attracted him. It was exclusive; he hoped none of the diners observed his burnt trouser leg as he made his way to an empty table, seated himself and studied the menu. He gave his order and continued his musing.

All his future actions, he decided, depended on one thing. He must get in touch with Robinson again. How he would do it he had no idea, but assuming that accomplished the next would be to help arrange manufacture and distribution of the antidote. After that the ships of the Empire—there would be no more than the usual three—would have to be destroyed, or at least their radio transmitters put out of action and the ships brought down to



Earth. Yerrall pulled himself up sharply; he was getting too far ahead of himself.

He noticed an evening edition of a paper lying on the counter beside the cash desk. When the waitress brought his food he asked if he might borrow it. She brought it over to him. Before he had hardly looked at it a small, blurred paragraph, an island of smudgy type in a sea of white newsprint, drew attention to itself in the otherwise clear stop press column. The plague, not so far called that, had claimed eighteen reported victims in the city, none of whom had died—yet. Quickly Yerrall scanned the rest of the paper, hoping to pick up an indication of the location of one or other of Empire ships waiting to come in to land, but on none of the pages was there mention of meteors or unidentified aircraft.

Yerrall folded the paper and placed it on the table, recalling his first

objective—he must find Robinson. He paid his bill and returned the paper, walking out into the lighted streets. Suddenly he realised he was glad the weather was warm; for a night or so he might have to sleep out. Any time he stayed too long in one place there was a chance the mechanical seekers would pick him up and their operators lay a trap for him.

The neighbourhood of Robinson's house would be dangerous, but Yerrall knew that from now on any step he took could mean death. He had to have assistance and the only person who could give it was Robinson. Yerrall squared his shoulders and hailed a taxi, directing the driver to take him to the burnt-out house. In a matter of minutes he was outside; he dismissed the taxi and looked at the crowd of people still at the smoking shell of the house. He wandered round the fringe of the gathering, trying to piece together the fragments of conversation he overheard.

Suddenly two pairs of steel-hard hands grabbed each of his arms and the muzzle of a blaster jammed into the small of his back.

"Yerrall, you're too dangerous for us to kill now," whispered Drifeld's voice. "You're going back home for trial."

Yerrall felt his muscles tense, forcing them not to obey the instinctive desire to attempt to throw off his three attackers. In reply to the tensing muscles, which Drifeld's men obviously felt, the muzzle of the blaster pressed tighter against his spine.

"Come on, Yerrall," ordered Drifeld grimly.

Yerrall relaxed, allowing the police to push him away from the crowd towards a little car parked twenty yards up the road. He waited, gun still in the small of his back, while Drifeld opened the door and gestured he should enter. While one policeman squeezed in on either side of him Drifeld slipped into the driver's seat and set the car in motion.

It slipped out of the town, past the still burning Health Section at the Pile and out on to the main road across the adjoining heath. After twenty minutes at high speed Drifeld cut the car's pace to a crawl and continually looked to his left as if searching for something. Eventually he saw his objective, checked with his policemen there was no other vehicle in sight, and drove the car off the road over bumpy ground towards a hump. Squinting past Drifeld's head Yerrall decided the mound was far too regular to be natural; it had to be a camouflaged tender to one of the vessels lying off Earth. Drifeld brought the car to a halt and turned round, forearm resting on the steering wheel.

"Take him back to the ship," he ordered the escort, "and make sure he's well locked up with Robinson. I've promised Robinson's guard a rough time if his prisoner escapes. You'll have one as well if Yerrall gets away."

"He won't escape," said the guard on Yerrall's right.

"I hope not," replied Drifeld grimly. He addressed his next remark to Yerrall.

"Get out. Don't try and make a run for it because you won't get away."

In silence Yerrall obeyed the order and stepped out of the car. One guard produced a blaster and trained it on him while the other collapsed the camouflage over the tender. In a few seconds she was revealed, a neat, slim ship glistening silver in the light of the faraway stars. Yerrall glanced up at the heavens; somewhere up there was a home he'd see for the last time before

very long.

A narrow slit of a door opened in the ship's flank; a gesture by the guard with his blaster Yerrall correctly interpreted as an instruction to enter the ship. The two guards followed him aboard, directing him to a little cell aft. The metal door clanged shut behind them, sealing Yerrall in a cube of metal illuminated by a solitary bulb in the ceiling and furnished with a foam-rubber couch.

Suddenly he realised the guards had not searched him; his hand flew to the pocket of his coat and felt Drifeld's gun, the weapon he had picked up this afternoon when Robinson had injured the Police Inspector. He slipped the blaster out of his pocket as the alarm gong indicated the ship was rising; the magazine held a full charge.

A feeling of hope began to grow in Yerrall. He was being taken, admittedly under guard, to the very place he wanted to go, to the ships lying off Earth awaiting instructions to complete the deadly work of the plague. But he was armed . . .

The flight to the parent ship took very little time; Yerrall estimated the tender could have been no more than a hundred miles up when motion stopped for a few seconds and a thump indicated she was resting inside the mother vessel.

Shortly afterwards the two guards, confident smiles on their faces, released him from the cell and escorted him out of the tender, through the combined hangar and repair shop in which she rested, to the punishment cells. They'd take him to those farthest away from the hangar but nearest the crew's quarters where he would be most easily accessible for the guards.

One of the doors at the far end of the corridor opened slowly, far more slowly than it should have done were it being opened by someone in authority. Yerrall realised the attention of the guards was also fixed on it. One of them drew his gun.

Robinson's grey-haired head and spectacled face appeared for a moment beyond the edge of the door. Instantaneously he snapped back out of sight as a blast from the guard's gun turned a spot of the metal door near where his head had been a dull, cherry red.

Yerrall fumbled in his pocket for Drifeld's gun and stepped back a couple of paces. Quickly he cocked the weapon.

"Drop your gun !" he snapped.

The guard who had fired at Robinson turned, an expression of surprise spreading over his features. Foolishly he directed his gun towards Yerrall.

Unconsciously Yerrall aimed the weapon and squeezed the trigger, feeling slightly sick as the blaster burnt a hole through the guard. The man flopped to the deck, his lifeless body crumpling against the wall. The remaining guard stared at Yerrall, eyes full of hate.

"Get along to the cell," ordered Yerrall. Silently the guard obeyed. Yerrall halted him a few feet outside the cell.

"Robinson," he called in a hoarse whisper, "Yerrall here."

After a few tense seconds came the whispered command:

"Prove it."

Yerrall pursed his lips. How could he? Swiftly he backed a couple of paces, gun trained on the guard while he rummaged in his coat pocket to

produce the process of manufacturing the antidote. He threw the papers on the deck in front of the open cell door.

"You asked me for those just after you injured Drifeld at Mrs. Hunt's."

A hand crept cautiously beyond the door; a fragment of grey-uniformed cuff indicated Robinson had somehow managed to overpower a guard. A couple of seconds later Robinson, gun in hand, walked round the door. His red face split into a grin as he saw Yerrall.

"Nice work," he congratulated. "I was begining to wonder how you were getting on." He paused. "Let's get that," his finger indicated the dead guard, "and this fellow in here and we'll see what we can do about disabling these ships. Where did you get that gun, by the way?"

"Remember you shot Drifeld in the shoulder this afternoon? I took it then . . ."

"That makes it dangerous. There'll be seekers searching for it. When they find it they'll explode the charge and if you've got it . . ."

"I'll feel the heat building up through my clothes." Yerrall glanced at the guard.

"Bring your friend's body along and put it in the cell."

For a moment Yerrall thought he would attempt to refuse; with a clenching of his fists the man walked slowly along the corridor and caught hold of the body by the arm. Unceremoniously he dragged it into the cell. As he straightened up Robinson brought down the butt of his gun behind his ear; with a little sigh the guard collapsed over the body. Speedily Robinson pushed his legs out of the way of the cell door and fastened it.

"How did you get the better of your guard?" asked Yerrall curiously.

"Easy," chuckled Robinson. "Drifeld promised him a rough time if I attempted suicide, so I faked an attempt." He pointed to his neck; Yerrall noticed suddenly he was wearing no tie.

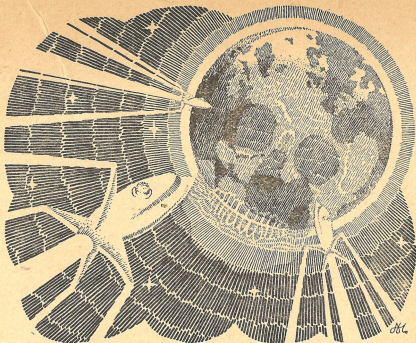
"We've got to disable these ships," continued Robinson, "and the way I suggest we do it is this. It'll be dangerous but we've got to get into the armoury. We'll get four charges and a remote control detonator. One charge we put in the radio room of this ship—it's the one with the link to the Empire in it—and the others we place one each in the light pickups which feed the motors with their power source. That will kill any chance of contact with the Empire, and since the ships are so near Earth they'll have no option to do anything other than crash-land . . ."

Yerrall felt a smile spread across his face as he interrupted:

"Earth is quite a pleasant world; there'll be some of the crews killed in the explosion and the landing and the Commanders will have a hard job to keep their men from deserting . . ."

"Exactly," interposed Robinson. "This Clearance Operation will just fade out. By the time a reconnaissance squadron arrives you—I repeat, you—have a great deal of work to do. Overnight you're going to change from a Health lab technician to a genius and provide this world with the details of getting to the planets using nuclear motors. You've also got to give a lot of hints of a possible Galactic drive to them, but take about thirty years over it; by then we who are trying to break down the Empire will probably have another job for you. Now let's get these charges."

Brain reeling, Yerrall followed Robinson along the deserted corridors of



the ship, halting every now and then while he studied indicator plaques on the walls. Suddenly, unconsciously dropping his voice to a whisper, Yerrall asked;

"When we get to the armoury how are we going to get what we want? It'll be guarded . . ."

"Only mechanically. We'll soon put whatever there is out of action. Think you could find your way back to the hangar?"

"Yes . . ."

"Good." Robinson took his gun out of his pocket and pointed it at a red indicator on the wall. "We're at the armoury; the disposition of the material is simple. What we want is in the third aisle along on the left. You stay outside and make sure we're not disturbed; I'll go in and get the stuff. We take one more turn to the left . . . ah!"

A faint hissing sound reached Yerrall's ears; from Robinson's exclamation he guessed the doctor had also heard it. Swiftly Robinson lunged round the last left turn to the armoury and turned the full power of his gun on the massive door in front of him, concentrating the beam on the panel of locks. Molten metal dribbled like grey tears down the face of the door; it finally gave out a heavy clank as the bolt fell open. Robinson dropped his gun and grabbed at the handle, exerting all the power in his arms to pull open the weighty door. Yerrall added his strength, mind only barely conscious of the hissing sound. He glanced at his feet, only vaguely surprised to see faint wisps of grey vapour curling round his ankles. He knew it would only

be a matter of seconds before the lethal protection gas reached his nostrils and killed him. That was assuming some of the crew weren't sent along to deal with Robinson and himself.

Robinson dived through the narrow crack between doorway and jamb, leaving Yerrall alone to face the corridor, empty except for the ghostly veils of gas rising slowly from the deck. The vapour had reached his knees, and the faint, sweet smell, characteristic of the gas, irritated his nostrils.

Robinson charged through the narrow opening, arms full of small packages.

"Ready?" he gasped.

In reply Yerrall forced two of the parcels from him and led the way back through the maze of corridors along which they had just come. From the junction of two passageways a withering barrage of fire lanced towards them; quickly they darted back the way they had come, making for the hangar where the tenders were stored by an alternative route.

"Yerrall," called Robinson, "takes these. Make for the tender; I'll plant this in the wireless room." Yerrall felt another parcel thrust into his hand as Robinson darted up the passage.

"Robinson . . ." he called.

"Get to that tender. I'll find a way out of this myself."

Yerrall obeyed Robinson's instructions reluctantly, trotting past the cell in which Robinson had been confined. He darted through the machine shop to the tender he had recently left and deposited his dangerous burden on the control panel. He checked over the controls swiftly, seeing Earth was a hundred and twenty miles below and he had sufficient fuel for a couple of thousand. In response to pressure on a button the airlock closed and after five seconds the little ship backed towards the airlock. The first door opened, receiving the ship in a black box of a chamber. Slowly, taking an eternity of time, the inner door closed, sealing off Yerrall from the mother ship. After another eternity star-dotted space appeared and Yerrall guided the little ship out into the emptiness.

From now on he had to be ultra careful. He could reckon once the crews realised he had taken one of their tenders any move they made would be directed against himself. He guided his vessel carefully round the bulge of the ship, keeping close to the hull in order to give the detectors little chance of picking him up. Finally he located the light pickup, a piece of apparatus looking like the eye of a fly seen under a microscope, and deposited one of the charges near it through the ejector hatch.

A glance round space showed him the nearest of the other vessels was a couple of miles away. He navigated his craft carefully, keeping a close watch for other tenders, deciding it unlikely any big armament would be brought to bear on him unless he showed signs of becoming dangerous. With, surprisingly, no action being taken against him he lodged the second explosive charge near the light pickup of the second ship.

The lack of opposition began to worry him; by now some sort of action must be planned against his little ship. He switched on the radio, seeing from the frequency chart on the set that it was tuned to inter-ship wavelength, and waited for something to come from the speaker. Nearly two minutes elapsed before only a mere routine message passed between the two ships on which he had planted charges. He snapped his vessel up to full speed and darted

across to the third ship, lying like a sulking whale a few miles apart from its fellows.

Yerrall carried his comparison further; the ships were whales, intent upon business of their own and too busy to notice the minnow darting between them. He wondered what the business was; one ship certainly was alerted to his presence. Smoothly he dropped down to the third ship and deposited the charge.

Now his real worries began; how soon should he explode the charges? Had Robinson laid the other charge in the wireless room yet and had he got clear? When Yerrall suddenly realised only the first part of the question was really important it felt as if a knife had been stuck into his body; Robinson might be dead even now. Without knowledge of whether or not the explosive was in the radio room Yerrall dared not set off the charges; the Clearance operation would still go on even if the ships were disabled but still maintained contact with their H.Q. and could call for assistance.

The radio spluttered; eagerly Yerrall listened to the harsh, hollow tones of the speaker.

"Can't reach Number One on her own channel," complained the operator. "There's no whistle on the beam frequency either." Hurriedly Yerrall studied the chart and adjusted the controls to the figure quoted against beam frequency. Static was the only response.

Yerrall swivelled the tender so he could look at the ship where Robinson was. As he studied her a little silver fish slipped into sight round the curve of the hull. The minnow approached rapidly; Yerrall read the number on her bows and looked it up on the frequency chart. Anxiously he returned the set. Robinson's voice crackled out of the speaker,

"... if you can hear me. I say again O.K. Yerrall..."

"Got you," interrupted Yerrall joyfully. He reached out and pressed the key on the remote control unit. Immediately a plume of flame shot up from each ship, pushing the vessels slightly out of their position.

"Nice work," congratulated the speaker.

"I was beginning to wonder..."

"It wasn't easy," crackled Robinson's voice. "I found the main fuse box and pulled out all the fuses except those on the circuit operating the airlock and then I dumped the charge in the radio room inside one of the inspection panels. Let's get back to Earth, shall we?"

In reply Yerrall dipped the nose of his tender towards the greenish-blue sphere and attempted to locate his part of the globe. Dawn was just creeping up over the rim of the planet, but as the two silver tenders landed on the deserted heath the sun had yet to rise on that part of the world.

Wearily and stiff, realising he had not slept for twenty four hours, Yerrall crept out of his vessel just as the first hint of dawn tinged the eastern sky with pink. Robinson clambered out of his ship and started to erect the camouflage; Yerrall followed his example. The operation completed they trudged across the heath to the road, hoping to pick up a lift into town or catch one of the all-night buses from the south.

The first vehicle to appear, just after the sun was above the horizon, was a bus. They waved it to a halt and clambered aboard, ignoring the curious stares of the conductor and the one or two passengers who were awake. They

paid their fares into town and relaxed gratefully in the comfortable seats for twenty minutes. They passed by the Pile, noticed that Health Section was still smouldering, and dismounted from the bus at the trunk station a couple of miles beyond.

"I'd like to give a shot of this stuff to Marie as soon as possible," said Yerrall. He chuckled. "I've just remembered, it'll have to be a sterilised needle: my room might still be booby-trapped in some way which will only operate when I enter it . . ."

"That's not likely now. We'll get a paper before long; there should be something in the stop press about a shower of meteorites. Do you mind if I come along to Mrs. Hunt's?"

"Not at all. I've grown very fond of her little girl. I think Drifeld got to know somehow and deliberately planned this part of the world as a plague centre . . ."

"Possibly," agreed Robinson. "Let's walk to Mrs. Hunt's; I've got a few suggestions to make. Remember, in a few days you're going to produce the secret of travel to the planets for this world. Now, listen . . ."

With hardly an interruption Yerrall listened while he and Robinson walked slowly along the deserted streets lighted by the cool rays of the early morning sun. A few birds sang in the trees and the air was heavy with the scent of blossoming flowers. Robinson stopped talking for a moment or two; Yerrall looked enquiringly at him.

"I'll get in touch with you after a couple of days. In that time I'll have got the preparation of the antidote for the plague in production and I'll arrange for you to meet some others of us. In the meantime . . ."

They turned the corner into the road in which Yerrall lodged, halting to stare at the empty space not quite half way along the street. A little crowd of people clustered round a heap of smouldering ruins and a few more poked about in the still burning debris which covered the site of the Hunt's house.

Yerrall swallowed a lump in his throat.

"Little Marie . . ." he muttered. Hope, which he quelled immediately, rushed to his heart. There could be no hope.

He walked slowly up to the little knot of people and asked a couple of questions. He almost didn't hear their answers, but knew what they were. Sometime in the night the Hunts' house had, for no apparent reason, become a flaming torch, burning itself out in less than a quarter of an hour. There were no survivors.

Yerrall walked back to Robinson.

"They're all dead," he heard himself say. He felt in his pocket. "Here's some of the antidote; I'm going out on to the heath for a walk. No," he laughed bitterly, seeing the anxious expression on Robinson's face, "I shan't do anything silly. I just want to walk out of my system some of the hate I've got for the Empire."

He turned round, hardly conscious of crossing the road and heading out to a little dell in the woods on the edge of the heath. A little stream trickled through it, bubbling over a clean gravel bed and trees, their fresh green leaves giving cool shade, came almost to the edge of the water. Yerrall flung himself down on the bank, placed his hands behind his neck to support his head and stared unseeingly at the chattering stream. He hardly heard the birds singing and barely saw the thrush which hopped up enquiringly

to his still legs and bobbed away.

A distant rustle of the bushes being parted reached his consciousness but didn't disturb him. Suddenly the bushes opened and a body, fists jabbing at vital parts of his frame, landed on him. Yerrall fought back, a quick glance at his attacker before a pair of steel-hard knuckles smashed one of his eyes shut, showing him it was Drifeld. Sickened, Yerrall allowed his defence to relax for a moment, long enough for Drifeld to smash his fist against Yerrall's face a second time. Dazed, Yerrall tried to push his assailant to one side, failing.

Suddenly the weight lifted off his body; with his one good eye he looked at Drifeld staring down triumphantly at him. At the sight of the gun in the Inspector's hand, Yerrall's fingers wavered to his pocket. There was no weapon there. Drifeld noticed the movement.

"Yes, it's mine. But I do have to congratulate you," grinned Drifeld through his thin lips. "You and Robinson have wrecked a Clearance team, marooned me permanently on this world and no doubt hope to prepare Earth against the next Clearance expedition the Empire will send along. You won't see . . ."

He broke off, forefinger of his free hand touching the barrel of the gun. He glanced at Yerrall, stepped over to him and murmured:

"Some parts of the ship must still be in action. This gun of mine—the seekers have found it; it's getting hot and it'll explode in a few minutes."

Drifeld's brutal foot kicked Yerrall beneath the jaw, releasing the salt taste of blood into Yerrall's mouth and sending him to the borderland of unconsciousness. Uneasily he remained still, listening amid a haze of pain, to Drifeld pushing his way through the bushes. He opened his one good eye but saw no sign of the Inspector; painfully he struggled to his feet and glanced at the ground beside him. The gun lay beside the marks his body had left on the grass, scorching a little brown patch out of the green carpet.

Gingerly he picked up the gun, and throwing it lightly from hand to hand as it became too hot to hold, staggered off through the bushes in the trail of Drifeld. He caught a glimpse of his quarry only twenty yards ahead, standing beneath a tree and looking about as if orienting himself. As quietly as possible Yerrall crept forward, gun scorching his hand. Suddenly the heat became intense; quickly Yerrall stood up and flung the weapon at Drifeld. The crackling bushes distracted the Police Inspector; a look of horror disfigured his face as he saw the gun flying through the air towards him.

Yerrall threw himself face downwards on the ground as a tremendous explosion ripped through the woods, shattering branches and sending a momentary gust of wind at hurricane force through the trees. The ground beneath him undulated like the waves of a stormy sea.

Suddenly everywhere was still. Yerrall hoisted himself to his feet and dragged himself past the explosion area, averting his eyes as he caught a glimpse of the tattered shreds of flesh and bone which only a few moments previously had been Drifeld.

At the edge of the wood he sat down on the grass and propped his back against a tree. This time he saw a thrush that looked enquiringly at him. Yerrall rose to his feet; the bird, already frightened by the explosion, flew away.

THE END

THE EXTERMINATORS

Many fascinating stories have been written round the theme of faster-than-light travel, but none have so beautifully posed the problem of a space pilot who returns home to find his wife has aged twenty years, while he has gained only three.

GOLDEN SLUMBERS

By J. F. BURKE

Illustrated by QUINN

As Earth gravity began to pull more strongly, a relay tripped. Over the bunks in the space ship the tubes glowed red and a pulse went twice, three times, four times through the arm bands of the men on the bunks.

Osmond opened his eyes. He lay still for a moment, then blinked. Not five minutes, he thought, since he had gone off to sleep; not five minutes.

His arm tingled from the resonator's awakening impact. It seemed that his blood was flowing sluggishly. His reactions were slow. He didn't want to move and he didn't much want to think. But as he lay there his mind began to tick over slowly. He sorted out his thoughts and tried to fit them together.

Not five minutes since he had gone off to sleep . . . That was true, all right. He rolled lazily over and studied the forward vision screen by his bunk, and knew that it had not in fact been five minutes since he was put to sleep. Nor five weeks. Time had been counted in years while he slept. Nine years this return journey had taken.

"You awake, Osmond?"

"Just dropped off into a doze, captain," he replied sardonically.

Someone further along the cabin rolled off his bunk, cursed drowsily, and pressed the switch that brought up the lights to full strength. There was a succession of yawns. Space boots clattered once more in the cabin that had been silent for nine years.

They were wide awake now. The ship was falling towards Earth; towards home.

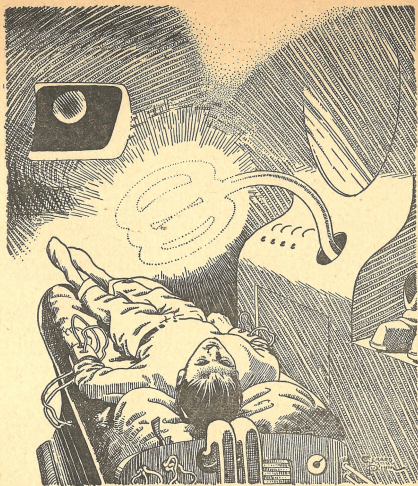
Within ten minutes they were at the panels, checking and nodding satisfaction.

"Two hours," said Osmond. "Two hours and we'll be there. Wonder what the old planet looks like these days?"

"At any rate," said the geologist, "it's still there. The galactic beam is still out, otherwise we wouldn't have come coasting in like this. So there hasn't been any major war while we've been away."

The six of them looked into the bright yet remote picture quivering slightly in the screen that glowed in the centre of the control board.

"What'll we be doing five hours from now?"



"Listening to a lecture in the rehabilitation centre," said the captain wryly.

"Aw, not that soon."

"Maybe not. To-morrow morning, I expect. After you've collected your loved ones. If any."

"If any!" echoed Sanders the geologist. "You don't catch me taking on responsibilities like that."

"You don't know what you're missing, son. Does he, Osmond?"

"No," said Osmond confidently. But inside he was not so confident. Inside he felt a queer sensation that wasn't unlike a mild dose of space-sickness.

And, as though another relay had tripped, they all began to talk about the women they had left behind, or else about their reasons for not having anything to do with women.

Osmond had married when he was twenty. Too young, some of his mates in the Galactic Survey Company said: this wasn't the life for a married man. But there were others who nodded and grinned and slapped him on the back and said you needed someone to come home to, son, when you'd been racketing about the glaring dizzy worlds among the stars. He was glad of these reassurances. It wasn't until he had made two or three short trips to the nearer planets and worked out there for a month or two at a time that he began to have his first serious doubts.

He felt he had pinned himself down too young. He ought to have knocked around a bit first: he ought to have seen the world, as they used to say in the old days, only now it was a question of seeing the universe—and beyond.

"You need to rough it," said one scarred old spaceman to him once, philosophically. "You need to see what's going on in the cosmos before you settle down and tie a string on yourself. There are times when you don't want to be pulled back to Earth right on time—but once you get married, there's a galactic beam on you and down you slide according to orders."

I don't mind, he had told himself. He loved Alissa, he would never want anyone else, and there was no question of his being tied down when he didn't want to be. It was more of a thrill for him to come home from Mars or Venus than it was for the others, the unmarried ones. To come home, dropping out of space towards the world on which his wife awaited him . . . You didn't know the meaning of the word homecoming until you felt as he had felt on such occasions.

And then, when the big trip was offered to him, Alissa raised no objections. He had told her he would be away for twenty years, and she knew what that meant. But she had smiled and said of course he must go, it was his big chance, and they had walked past the great building that was the Galactic Survey Company Dormitory and stared up at it, and made plans for the future.

The Dormitory was the obvious counterpart of the animation suspension equipment on every long-distance space ship. When a trip across the galaxy was going to take anything up to thirty or forty years, you needed to stop living for a while: you needed to go into the long sleep of non-being while the journey was on. And then at the other end of the journey you awoke, got on with the work that was waiting for you—a year's work, perhaps, or at the most two years'—and came back, asleep, across another stretch of years. You slept a dreamless sleep while the mesh of pilot beams that lay across the universe looked after your ship, flicking it through space and sorting it at last into the right channel, the channel that led back home. And your wife and family—or even your girl friend, if she had promised to remain true to you while you were away, and really meant it—were taken into the Dormitory and sent into a similar dreamless slumber to await your return. The years could slip by: you would not grow old. The familiar landmarks might have changed considerably while you were away—ten years made a tremendous difference to the world you had known before you left—but you would not have to face the strangeness alone. In your own mind, and in hers, you had not been away long. Not long at all.

"And you know what she'll say when she opens her big blue eyes?

Osmond heard the mate saying. "She'll say 'Honey, it *can't* be that time. Why, I only just dropped off.' And she won't believe I've been away and done a year's work."

It was one of the jokes of the spaceways, this situation. A joke that was sometimes darned irritating.

"You never get used to it," the captain confirmed. "You lean over the bunk and wake her up, and you're all set for a happy reunion—it really seems like ten or twenty years to you, after all that work out on the other side of space—and she just won't believe you've been and come back. First time it happened, I cursed at her. We had a quarrel, I can tell you: what a bust-up that was! And even now I have to watch my temper."

"They ought to let the women wake up a week earlier," said the mate. "That way, they could get used to the placed and have a look at what's changed and be ready to show us round when we landed."

Sanders the geologist grinned maliciously. "They'd get to know too much. They'd lead you a hell of a dance. In fact, they might not be around at all by the time you got there."

They all laughed. Osmond said:

"There's just as much danger of that now, if you're going to be one of the untrusting kind. They allow them a week of freedom immediately after we've gone, before getting them settled down—"

"That was instituted in order to get over the trouble I was talking about," said the Captain, narrowing his eyes as the approaching Earth filled the screen. "At least they wouldn't wake up with the sensation that it was only a second since they closed their eyes. I wasn't the only one to get mad about that business. Everybody did. They had to do something, and that was the best time to do it."

"They could still walk out on you if they wanted to," Osmond pointed out.

"Something psychological about it. Less danger of doing it then, according to the experts, when they've just said goodbye and they're surrounded by their own familiar world, than if they were to wake up in a strange world that bewildered them—and perhaps find themselves with people whose moral outlook had changed. Outlooks and conventions change every ten years at the outside, you know."

"It's still risky," said Osmond.

"Scared?" said Sanders.

Osmond flushed. "I was discussing the matter theoretically."

"Personally," said Sanders, "I wouldn't trust any woman on her own for a week, at the beginning or the end of the time I was away. Or even in the middle, if it comes to that."

"No-one would blame anyone who walked out on a misanthrope like you," snapped Osmond.

"See here, you little space-cub—"

"That'll do," said the Captain brusquely. "We're nearly there. Get yourselves strapped down again. And strap your tongues down while you're at it."

They glanced once more at the main screen, and scrambled back on to their bunks. Within five minutes there was a gentle shudder down the length of the ship. A vibration that made no sound but beat on their minds came

quivering into being. The captain adjusted the padded straps on his chair, and leaned back. He watched the dials that had suddenly begun to flicker with renewed life. And then, slowly, his arm moving against a strong pressure, he reached out and touched the radio switch.

He said: "Expedition 528 homing. 528 homing. Starving Propulsion—we shall need a clear hundred yards wash allowance. 528 coming in."

It will be all right, Osmond told himself. The pain inside was more than the vicious thrusting pressure that every spaceman knew, but he tried to pretend that there was nothing to worry about. It would be all right. He needn't get himself worked up about Alissa, who would be waiting for him—the beautiful Alissa he had known such a short time but loved so much. Once he was with her everything would be all right. He'd get over this strange ache, this feeling that he had missed something. Once he was with her he'd forget the longing to be free, so that he could roam at will over the universe, undertaking this and that adventure. It was only fools like Sanders who sneered at marriage and respectability and a settled background. It was stupid to wonder if perhaps you had missed something.

It would be all right. When he pressed the switch beside Alissa's bunk in the Dormitory, and she opened her eyes—"Like a lot o' sleeping beauties stretched out waiting for a platoon of princes," chuckled someone behind him, still talking on the same subject, the inevitable obsessive theme)—when he saw her open her drowsy, languid eyes, maybe he would find that she was still the most important thing in the universe.

He hoped so.

"Here we go," said the captain exuberantly.

Breath went, memory and the possibility of speech went, and for a matter of seconds consciousness went. Then they were aware of stillness and the dying whine from the rear of the ship. They began with excited fingers to unfasten the straps.

The opening door. The smell of fresh air, the intoxication of it. The distant hills and the white towers of the remembered city, its skyline still not too violently altered despite the passage of time. The rush of sentiment that choked all of them, even the wry-mouthed Sanders . . .

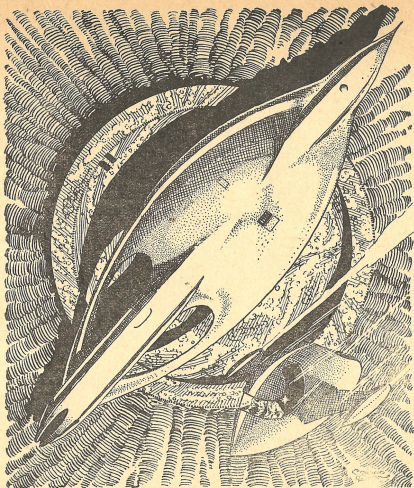
"Good trip?"

The reception officer greeted them with a professional smile that held something more than the usual formal welcome. He looked amused. His clothes were made of some light material that had not existed when the travellers went away from this planet; he exuded the smell of a perfumed soap that was new to them: he looked smug and amused and faintly contemptuous.

"Always the same," the captain muttered to the mate. "Every time you come back you find these cocky young gravity-slaves sneering at you as though you were something too darned olde-worlde to be believed."

"This way to the inspection centre, gentlemen," said the reception officer.

He walked with a willowy sway. He pointed out recent additions to the great sprawl of the space port as they followed him, waving his hand with negligent satisfaction as though he were personally responsible for everything that had been done.



The formalities were soon accomplished. There were one or two new features about it—one of them being the increased speed, which drew a favourable comment from the captain. He said to the elderly officer in charge:

"What have you got in store for us this time? I never know what the world's going to look like. Autocars on stilts, or is there some new way of flashing advertisements in front of your eyes as you walk along the street, or—"

"How do you know they haven't found a way of flashing advertisements directly on to your brain pan by now?"

"Nothing would surprise me."

The certificates were signed, and a report from the inspection squad was duly flashed in to the office. The man in the grey uniform nodded, light striking from his iron-grey hair. He said affably:

"You know the routine? Enjoy yourselves tonight, but be careful. Stick to the Company's own places of amusement if you can. You're not used to the world yet. And be sure you're at the rehabilitation lecture tomorrow morning."

They stood up, all of them slightly dizzy with the prospect of the stretches of freedom lying before them.

"One thing—I'd like a word or two with Charge Operative Osmond before he goes."

The captain lifted one eyebrow and jerked his head at Osmond. Then all the others filed out, and Osmond looked apprehensively at the man behind the desk and said: "Sir?"

"Sorry to start things moving right away, as soon as you're back"—the voice was hearty, a shade too hearty—"but . . . well, how'd you like to go to Venus for a little while?"

"At once?"

"Next week."

For a moment the young man tingled with a boyish anticipation. He had never been to the planet, but knew all about it: he had heard of its riotous gambling hells, its frontier towns, the rich steamy luscious atmosphere. You needed to be tough to work on Venus, and tougher still to play on Venus; but it was a place of excitement that was remembered by those who had ever been there—remembered affectionately, always leading to conversations that began, "Do you remember that night when we had that hell of a time . . .?"

He slowly said: "I've been away a long time. My wife wouldn't like the idea. It's not like one of the long trips where you go into suspended animation. She'd fret."

"You could stay there a long time," said the older man, looking down at his desk and fiddling with a steel engraver. "She could have a sleep while you were away."

There was something wrong. Osmond knew there was something wrong. He said:

"If the Company wants to send me, I'll have to go. But I understood we were entitled to at least two years on Earth after a long trip like the one I've taken."

The other man nodded, his lips pursed.

"In that case," said Osmond, "I think I'd better have those two years. I'll be getting along to wake my wife, if you'll excuse me, sir."

Slowly and reluctantly the man behind the desk said: "I'm afraid . . . well, it's no good trying to break it to you gently. You've got to know. You won't find her at the Dormitory."

Osmond stared. But—

"She never arrived. She didn't show up. I'm sorry son, but she's not there."

He stood in the open air that he had longed for from across the universe, and signalled to a helicar. It was an old one. There were other, newer vehicles that he didn't like the look of. People grinned as the helicar came down. It was evidently an old-fashioned one, kept for the benefit of tourists and an older generation who didn't like the modern craze for speed. Those

people grinned as Osmond himself would have grinned (it seemed only yesterday), at, say, one of those old freaks with a propellor that there used to be knocking about.

"The Dormitory," he snapped. "As quickly as you can make it."

Yet why hurry? He would not find her. She was not there.

They confirmed what he had been told. They nodded and expressed their regrets, but he suspected that behind the appearance of sympathy and consideration they were laughing at him. After all, it was quite a joke. The loving wife had said goodbye to him at the space port and then wandered off with no intention at all of presenting herself within the week at the Dormitory. Here was one case to prove the psychologists wrong: here was one woman who hadn't shown up.

"An accident," he said desperately. "If she was run over, or—"

No, they assured him: there had been no accident. The accidents had been checked. A non-appearance was a rare thing, but they had a first-rate system that came into operation at once in the event of such an occurrence.

"Amnesia?" he said.

"Possibly amnesia. It's been known."

But secretly they were amused, he knew. They did not believe in accidents or amnesia. When he had gone they would laugh and make degrading conjectures about what had happened to Alissa.

Alissa.

The name was a hopeless echo, a faint, hollow, nostalgic sound across the space of twenty years.

He stood at the top of the steps outside the great Dormitory and looked out across the multi-coloured park, perpetually brilliant with the unfading splendour of plants from Mars and Venus and worlds across millions of miles of space. Perhaps some of his companions would be arriving at any moment. Perhaps they had already arrived and awoken their wives, and now they would be strolling in the rich-hued glades of that park.

Alissa had gone. She had waited until he was on his way across space, and then she had walked out.

Why?

It was no good worrying now. It was over. She was lost in a past he could never know. Somewhere in time past she had betrayed him, and there was no way of reaching across that gulf now. He could ask no questions; he would never know any of the answers now.

He thrust his hands into his pockets and stared hopelessly down into the park. He did not know what to do now. There was nowhere he wanted to go. Couples strolled in the park, sky advertisements spelled out the names of shows and of some programme that meant nothing to him—something new that might have been a development of television or of the old sensory entertainments that had once been all the rage. None of it was real.

He looked unseeingly at a woman who sat on a seat in the park, just within the main gates. She wasn't real, either. This was not his world. He was an alien, a man who had no business to be here. He had nothing to live for: no ties with this place, no use for anything it had to offer.

The woman got up. He abstractedly watched her as she disappeared into the subway and came up on the pavement below, at the foot of the steps. She was a sleek, well-groomed woman about twenty years older than himself



—mature and beautifully poised, yet with something in her expression that was almost like fear as she approached. It was not until she began to ascend the steps that he really stared at her, and really saw her.

She was Alissa.

She said: "Don't say anything, darling. Not right away. Let me tell you all about it before . . . before you get angry."

"Before I get angry?" he echoed. "I should say there's plenty to tell."

They went down the steps and back into the park she had just left, where the leaves of a Martian shrub whispered drily and unceasingly, and there was a heavy cloying smell from a Saturnian fuchsia.

He wanted to touch her hand, but he could not. This was not Alissa: this was a stranger, a mature woman who had nothing in common with him. He said abruptly:

"Quite a coincidence, you being here."

"I've been waiting for you," she said. They found a seat and sat down. She went on: "I checked up and found you were booked in for to-day, so I came here early this morning and waited. I didn't dare come to the space port. I felt I had to be here, where we could sit and talk."

"All right. Keep talking."

"I walked out on you," she said, her mouth twisting with bitterness. "I was unfaithful to you. I waited for you to get out into space and then I went off with the man who had been waiting for the same thing—for you

to go. That's the way it was. I'm not making any excuses. There aren't any excuses. That's just the way it was."

Covertly he studied her profile. There were tired lines that had not been there before, but the flawless shape of that beautiful face remained the same. Its beauty had not changed: it was only that upon the earlier beauty had been written messages of experience, of suffering and self-knowledge.

Osmond said: "You didn't love me, then?"

"I did. I loved you. You've got to believe that. But I was mad. I was weak. If I hadn't been weak, I might still have been saved. We lived together for six years, and they got worse and worse. The last year was hell. I walked out, and when I'd walked out what was I to do? I ought to have come straight to the Dormitory, told them some sort of story, proved my identity, and gone to sleep then. You'd have noticed the difference when you came home but . . . well, six years isn't much of a difference, is it? You wouldn't have minded that so much."

"But you didn't do that," he said flatly. "What did you do next?"

Tears ran slowly down her cheeks. She did not bow her head but looked straight in front, talking in a clipped voice as though to get it all over with as soon as possible. She said.

"I won't tell you everything that happened. Not all at once. But it wasn't a pretty life. It wasn't a life I'm proud of. And all the time I was discovering how much you really meant to me—how much I loved you and how proud I was of you, deep down . . . and how impossible it was that I should ever see you again. Every year I lived in the world outside the Dormitory took me further and further away from you. Until in the end I stopped trying. I stopped trying to persuade myself to come back here and let them put me to sleep, because I knew it was no good: I knew you wouldn't want me."

He did not reply.

"Six years between us wouldn't have been so bad," she said; "but as things are now, it's pretty hopeless, isn't it?"

For the first time he leaned back against the arm of the seat and looked full at her. The exotic flowers formed a gaudy background to her dignified, almost austere beauty. He marvelled at her. She took his breath away. She was as desirable as ever, but the situation was absurd. That eighteen or nineteen years—he had no intention of working it out to the nearest month—was an impossible barrier.

She said: "You don't want me, do you?"

He said: "What made you come here and wait for me?"

It sounded like a challenge, and she winced. "I couldn't help myself. I had to come. I told myself I would be satisfied with a glimpse of you, and I wouldn't try to speak to you. But when I saw you, I—I couldn't help it. I'd forgotten quite what you looked like. And all at once it seemed only yesterday . . . I'm sorry."

"It wasn't only yesterday," he said grimly.

"No." She wiped her eyes and took a deep breath. "I didn't come here to beg forgiveness or anything like that. I'm sorry to have made a scene. I don't want to appeal to your pity. I'm not putting on an act. It's all finished"

"Is it?"

He saw that it was not hope but sincere incredulity that made her start. She said: "Of course it is. What could there possibly be for the two of us now? You can't make me grow young again. There's no way of wiping out the larger part of twenty years."

"No," he said, with a flicker of a smile, "but there's a way of covering the distance, if you see what I mean."

They walked up the steps again, laughing shakily about it. They were unsure of one another, but when he came back things would be better; things would be all right.

"You wait and see," he promised.

For a moment he almost wanted to hold her away from the great slumbering building. He wanted to take her away now because she was so beautiful. But it was out of the question. It was not the years themselves that separated the two of them, but the experiences those years had held for her. She made him feel callow and awkward. Once they had been young together, but now she had gone beyond him and if he wanted her there was only one way to reach her. And of one thing he was sure: he wanted her.

"I'm going to catch you up," he said as they hesitated outside the doors. She nodded, still not believing that it was all going to work out all right.

"While you sleep in there," he said, "I'll be living through the years on Venus and all the other planets they like to send me to. I'm going to—~~to~~ grow up."

That was it, absurd as it sounded; he was going to grow up. Alissa was his wife and he loved her, but he was not ready for her yet. He saw the question in her eyes that she dared not ask, and he was not sure that he would have been able to give an honest answer. There would be excitement in his life, and there might be other women. He didn't know. But he did know that Alissa was the one who mattered.

"The danger," she said: "anything might happen, and then what would I do? I've been a fool, and I don't deserve you, but—"

"I'm one of the lucky ones," he said confidently. "I'll come back all right."

He would take the job he had been offered today at the space port. He would see Venus and all the worlds there were to be seen, and would make the most of his life. Alissa would be waiting for him here, where she should have been all along. He would overtake her eventually, when he was no longer a callow young man. All the time he would be checking off the years on a calendar in his mind, and at last he would return to this building to awaken Alissa. Trying to make a joke of it, he put his arm round her and said:

"I'm not so sure you'll want me when I get back. I'm not answering for what sort of a man I'll be by then. It's a long time."

"I've wasted so much time," she said. "So long as you come back, that's all I ask. That's all I want now."

They opened the doors and went in. And as the quiet-moving attendants settled Alissa into the bunk and fastened the connection upon her arm, Osmond leaned over her and said again:

"I'll come back all right."

THE END

NEW WORLDS

Open Sesame . . .

The advent of Coronation Year has virtually opened the flood gates for science-fiction publications to pour in, for the New Year was hardly born before advance information of a virtual spate of new magazines and books was announced. Although I stated a few editorials ago that science-fiction had "arrived" in this country it seems a far cry to three years ago when *New Worlds* was virtually a lone voice in the publishing wilderness, pioneering along sharing what honours there were with the British edition of *Astounding Science Fiction*.

Now, with 1953 only a few weeks old, we have the British edition of Lester del Rey's *Space Science Fiction* with us, and Horace Gold's much publicised *Galaxy*, both projected as regular monthly periodicals. That makes three monthly reprints, plus our old friend the British *Authentic Science Fiction* which has arrived this month in an attractive new format. The situation in Britain is now similar to the American field in 1939, but, whereas the American field had reached stability over a period of many years, we have arrived at that position in a rush. The question now is: will there be a buying public to sustain so many regular publications?

One publisher violently disagrees with me over this point, but I maintain that the *potential* reading audience in this country for science-fiction has always been there waiting to be tapped—providing that the literary quality of the stories are of sufficiently high standard.

New Worlds continues to pioneer along building up a strong team of new British writers, and giving opportunities to new writers who are at present unknown in the field—that our policy is beginning to pay a dividend is evident by the number of stories we have published in the past which are now being asked for by publishers outside Great Britain.

In the book field 1953 heralds in an outstanding world event with Sidgwick & Jackson's *Science Fiction Book Club*. This is an unprecedented step in the science-fiction field. As with the International Fantasy Award idea, Great Britain is one jump ahead of the Americans again—to keep us there the Book Club needs the support of every enthusiast in the country. Naturally, it will be to your own ultimate advantage.

The year also augers well for Museum Press's *Science Fiction Club* series and Weidenfeld & Nicolson's *Science Fiction Shelf* series, both of which have a full and extended programme of outstanding titles listed. Grayson & Grayson Ltd. and T. V. Boardman Ltd., both of whom pioneered hard-covered science-fiction in this country, have outstanding titles coming up, and many other book publishers will be entering the field during the year with their first novels. While, in the pocket book field, Kemsley Press plan further titles in their excellent *Fantasy Book* series.

All in all, it looks like being a year long to be remembered. That *New Worlds* was directly responsible for this exciting chain of events is perhaps a little too much to believe, but you can take it from me that the survival of this magazine during the lean period when science-fiction was derided rather than admired, had a great deal to do with the upsurge of 1953.

That means you readers are the direct cause of this happy state of events. Many thanks.

JOHN CARNELL

With A-bomb and H-bomb tests becoming almost everyday occurrences, this article is of great interest to the general reader in that it sets forth just what happens when an atomic explosion takes place.

THE ATOM BOMB

By T. OWENS

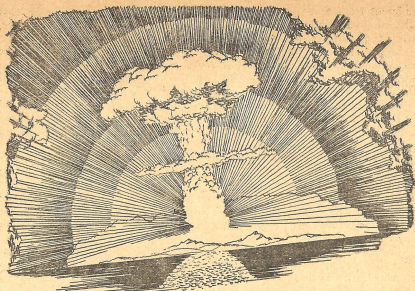
The atom bomb is a prop on which present day s-f writers tend to lean. The after-effects are too often exaggerated, and there has been much wild surmise about the effects of radiation from this (admittedly), super weapon.

What then *are* the facts about an atom bomb? And in what way does it differ from an ordinary explosive?

An explosive can be defined as a substance which can be made to release a lot of energy in a short time. Prior to nuclear-fission most explosives were composed of chemical compounds whose molecules could be made to break down into simpler ones. In doing so they liberate heat. Borrowing the phraseology of atomic physics, we could describe the process as a chain reaction, inasmuch as the heat liberated by one molecule in breaking down decomposes its neighbours, which in turn decompose their neighbours—and so on until the whole mass of explosive is decomposed. The result is a rapidly expanding gas at high temperature. This sudden expansion sets up a blast or shock wave which travels outwards from the explosion at the speed of sound. One of the most powerful of these explosives in general use is trinitrotoluene, or T.N.T. There is, however, a vast difference between an explosion from T.N.T. and one whose cause is atomic fission.

T.N.T. oxidises explosively giving rise to a pressure wave known as blast. The maximum temperature of a T.N.T. explosion is about 5,000 degrees centigrade, whilst the maximum temperature of an atomic blast is in the region of 1,000,000 degrees centigrade. Also, the blast differs from that of H.E. in that at a point of identical pressure the A-bomb blast lasts one hundred times as long. The bomb used on Hiroshima was estimated to have more than two thousand times the blasting power of the British ten-ton H.E. bombs used in the last war.

When the uranium breaks up there is created an incandescent sphere which attains a diameter of 45 feet one ten-thousandth of a second after the bomb is exploded. The temperature of this atomic fire-ball is so high that the surrounding air is rendered luminous to such an extent, that at a distance



of $5\frac{1}{2}$ miles from the centre of the explosion the light is one hundred times as bright as that of the sun seen from the surface of the Earth.

For a period of little more than a second the nucleus of the explosion radiates heat and light more intensely than does the sun. This constitutes the so-called heat flash which travels outward at the speed of light. It reddens concrete, fuses sand, roughens granite, and blisters tiles.

It should be noted that in the case of an underwater or underground explosion, the heat flash would not be present as the surrounding matter is radiation opaque and acts as a screen.

Next comes the shock wave, moving out from the centre at terrific speed. Growing too, is the ball of fire. In 0.15 seconds, it has attained a diameter of 300 feet and the outside temperature is 5,000 degrees centigrade—hot enough to melt steel. This stage of the explosion is known as the breakaway, and the shock wave is travelling at 15,000 feet per second. At the end of one second the fiery globe has a diameter of 450 feet, in ten seconds it becomes 1,500 feet. Below is what a table of the nucleus of explosion would look like:

<i>Seconds</i>	<i>Diameter of fire ball in feet</i>
.0001	45
.015	300
1.0	450
10.0	1,500

At first glance this seems much slower than would be expected, but when it is taken into consideration that these figures refer only to the centre of the explosion, and that when this nucleus has a diameter of 1,500 feet, the shock wave accompanying it has extended two miles in all directions, it is then that one begins to appreciate the power of the bomb.

This shock wave, incidentally, has a mechanical effect which is quite

different from that produced by T.N.T. in so much as it produces mass distortion of buildings; the buildings being engulfed by the pressure wave, while the roofs are pushed down from above.

Immediately after detonation there is a rapid rise in pressure causing a cyclonic wind: followed by a fall in pressure lasting one second. A suction wave then follows which causes the wind to reverse in direction. Most of the damage is caused by the blast, the suction wave having little effect.

Owing to the formation of oxides of nitrogen a violet glow is produced in the air, which persists for some time. The explosion at Bikini produced a peach-like colour of the clouds, this colour was assumed to be due to nitrogen-dioxide, of which 100 tons was produced.

The high temperature sphere of gases formed after the initial expansion of the bomb radiates not only heat and light but also neutrons, gamma rays and beta rays. The beta rays can be discounted as they do not radiate to any great distance, and do very little damage. The neutrons penetrate further, but those persons liable to feel the effects of neutron bombardment would be so close to the centre of the explosion that they would be killed in any case.

The gamma rays only radiate for a period of one minute, but during that time they penetrate practically everything, even personnel inside buildings are killed by them up to one mile radius. As with the heat flash, these effects are only experienced in air bursts; in underground or underwater explosions the surrounding matter acts as an effective screen.

There is, however, another effect which is connected with neutron emission, and that is secondary radiation. The neutrons penetrate the atoms of the dust of demolished buildings, etc., and render them radioactive. These radioactive products are scattered about after the fury of the atomic blast has expired and can cause radiation sickness for some time afterwards. As these secondary radiation products have only a short "half-life," the total isolation of a bombed area for a few months should be quite sufficient.

In the event of an atomic war it would be policy for the attacking commander to ensure that the bomb was exploded above 1,000 feet. At that height the blast would still be effective. In fact, the heat flash would be even more effective, as buildings would not tend to "shadow" it. The main argument for exploding the bomb at a height, though, is that danger from radioactive dust would not prove so hazardous for the "mopping up" troops who would be sent in later. Again, too, gamma ray and neutron emanations are dissipated in the atmosphere which acts as a moderator. It is interesting to note that a bomb exploded above 500 feet leaves no crater, even though the ball of fire will reach the ground in just over one second and vaporise metals in the process.

Theoretically, the height of an atomic-cloud would find its limits in the stratosphere. A test at Alamagordo has confirmed this. The bomb used was described as a "nominal"-sized one. A "nominal"-sized bomb is estimated to contain one kilogram of uranium 235 and to be equivalent to 20,000 tons of T.N.T.

A "nominal"-sized bomb was detonated under water at Bikini Atoll. For reasons stated earlier in this article, the heat flash was absent. A plume of water was thrown to a height of more than 8,000 feet, the diameter being 2,000 feet. This 2,000 feet column, however, was hollow, the walls of the

column being 300 feet in thickness. The total weight of water thrown up was estimated at a million tons. On reaching its maximum height and falling back, a mist wave, nearly 1,000 feet high, was formed. This mist wave, which has the characteristics of a homogenous liquid (due to the density of the liquid droplets), is known as the base surge, and formed ten seconds after the detonation. This, rushing at high speed over the surface of the sea, created what seemed to be a heavy rain storm. As it moved forward it lifted off the surface of the lagoon and took on the appearance of a cumulous cloud. A cloud of radioactivity was also formed, which was detected faintly ten days later on the Pacific Coast of America.

It is not likely that bigger and better atom bombs will ever be made. The vital constituent of the bomb is the unstable element U-235. This is only unstable above a certain mass known as critical mass. In the construction of the bomb, the critical mass is divided into two sub-critical masses, separated from each other by a short distance. In order to detonate the bomb these two pieces of uranium must be brought into contact extremely rapidly. If they approached each other slowly the explosion would be milder and much of the bomb's effectiveness would be lost. In practice, one piece is shot towards the other by a charge of ordinary explosive.

Consider then the problem of making a more destructive A-bomb. The two pieces of uranium must each be at sub-critical mass prior to the explosion. Increase their size and they are at critical mass. It is not feasible to use more than two pieces for they must meet at the same instant. If they did not come into contact simultaneously then the bomb would tend to flare rather than explode. In order to make three or more pieces meet instantly requires a degree of timing that could not be guaranteed and a failure must prove expensive. The only way then to obtain a bigger bomb is by making a hydrogen-bomb !

Up to the time of writing this article there has been no official announcement that any nation has succeeded in unravelling the secret of thermo-nuclear fission. That is, nobody has yet made an H-bomb. One would say that the difficulties were insurmountable were it not for the fact that at least two major powers are actively—and no doubt, expensively, engaged on such a project.

The main difference between an A-bomb and an H-bomb is that while the A-bomb derives its energy from the breaking down of matter, an H-bomb depends, for its energy, on the manufacture of an element. Four hydrogen atoms are used to create one helium atom. As the atomic weight of hydrogen is 1.008, and that of helium 4.003 it will be seen that some mass will be left over. This mass cannot exist independently, so to speak, and would thus release energy in enormous quantities.

In order to build a helium atom, temperatures of several millions of degrees are required. To date, the only way of attaining these temperatures is by way of nuclear-fission. It follows, therefore, that the H-bomb will have to have incorporated in it an ordinary fission-bomb to supply the necessary heat to start the hydrogen-helium reaction.

However, matter at such high temperatures radiates energy very fiercely and cools extremely rapidly. It is probable that before the thermo-nuclear reaction has properly started the temperature of the "fuse" will have dropped

too low. It is true that thermo-nuclear reaction takes place in our own sun, but radiation can only escape very slowly (relatively) from a mass the size and density of Sol. This does not apply on earth, where the low mass of any feasible bomb would allow radiation to escape fairly easily.

These then, are the difficulties nuclear physicists have to face. Once overcome there would be no upper limit to the size of the bomb that could be manufactured. When started, a thermo-nuclear reaction would be self-supporting provided that there was sufficient hydrogen to feed it. Unlike the A-bomb there is no difficulty with critical masses of materials. As the hydrogen is quite stable it will always be safe, until heated to the fantastic temperature necessary to start the reaction. Then, it is estimated, the explosive power would be equivalent to something like a thousand fission bombs.

An explosion of this magnitude would lay waste an area some twenty miles in diameter. By use of a bomb-casing material specially designed to absorb neutrons strongly this bomb could be made excessively fiendish. The radio-active substance thus formed would radiate strongly and have a life-time of some months or even years. The contamination would exceed that of the A-bomb ten thousand-fold, and large tracts of land would be rendered untenable for all animal life.

Since the above was written unofficial news has been released that the United States has initiated "an explosion greater than has ever been set off before." The test was a "stationary" one, and took place at Eniwetok Atoll, autumn 1952. It is usual to use a site situated in the Nevada desert for U.S. "first" atom tests. The information that the site had been changed to Eniwetok suggests that the H-bomb has at last been perfected. If such is correct, it becomes obvious that the problem—how to sustain the heat long enough to initiate the explosion—has been overcome.

It is probable that this has been done by using hydrogen nuclei in a more reactive state, as it were, than those of ordinary hydrogen. Thus, the heat to initiate the reaction need only be applied for a short time.

Heavy hydrogen and lithium 6 are suggested as possible solutions. Heavy hydrogen is made up of hydrogen with a double core, so that instead of four hydrogen atoms being needed to build up helium, only two of the heavy variety are required.

With lithium 6 it is necessary to make use of a nuclear reactor, and by bombarding the lithium with neutrons a rare form of hydrogen is produced which is known as tritium. Tritium is a half-way stage to helium and is radioactive. Its half-life is roughly 18 years, and it is this man-made element, in all probability, that was directly responsible for the worlds "greatest ever" explosion at Eniwetok—if the reports were true—and everything points to them being so.

THE END



In the political scramble to be first nation on the Moon, nobody gave a thought that the cycle may have repeated itself—that in another time somebody else had been there.

JETSAM

By A. BERTRAM CHANDLER

Illustrated by HUNTER

With deceptive ease the rocket drifted down, down, the flare of her exhaust vivid against the black sky, the long, down-reaching streamer of incandescent gas stirring the fine pumice dust to a coruscating flurry, then, as she lost still more altitude, fusing the almost impalpable powder to a slag that glowed red, red beneath crusty, thickening grey, for minutes after her passing.

Auxiliary jets flared briefly, fiercely, to kill her lateral drift. Again they flared, and a third time. The rocket was all of ten feet above the almost featureless surface when, suddenly, main and auxiliary jets went out like a snuffed candle. She fell—but with an odd, almost nightmarish slowness. She landed as silently as she had come, tilting heavily at first, then slightly, first one way and then the other as the powerful, fluid-damped springs, not unlike the recoil mechanism of a piece of artillery, took the weight and the shock and, after the preliminary swaying and quivering, allowed her to assume an upright position.

She stood there, then, gleaming in the harsh sunlight, a bright ovoid suspended in the tripod that was her vaned landing gear. She should, perhaps, have looked strange, alien—but she did not. She was as much part of the scheme of things as the plain of pumice dust, as the ring craters, as the serrated ridge of the distant mountain range above which hung, seeming almost to touch the jagged peaks, looming huge in the black, diamond-spangled sky, the great, cloudy opal that was Earth. She was new and bright, barely scarred by her swift passage through the atmosphere of her mother world—but she belonged. She was new, the first of her kind—but the dream was old, old.

She was part of the dream.

Inside the rocket, in the cramped living cabin that was also the control room, the men pulled their bulky, cumbersome spacesuits on over their thick woollen underwear. The biggest of them all, the Captain, adjusted clips and zippers stolidly, did not so much as glance out of the now unscreened ports on the shadowed side of the rocket. The Pilot, the Radio Technician and the Engineer tried to follow his example. Only the Navigator—his slight body was almost that of a boy and had not yet lost his boyish enthusiasm—stood staring out at the Lunar landscape, his fingers fumbling as he stared, groping vaguely through the intricacies of the airtight fastenings.

"This was all part of the dream, as he was part of the dream at last.

"Sparks," said the Captain, "you'd better make sure that the Stargazer has done his suit up properly. Otherwise I don't know how we shall find our way home."

"We can do without him, sir," said the Radioman. "Earth's too big to miss—at this range."

"That's what the boys of the garrison'll be saying," laughed the Pilot. "When we get the launching site established."

"If they give us time," said the Engineer.

"Enough of that," said the Captain. "We're here, and that's all that matters just now. We have our job to do—preliminary survey, samples of soil and rock, as much exploration as we have time for. As far as our friends on the other side of the Curtain are concerned—this is no more than a scientific expedition. Understand?"

"We understand," said the men.

"Hurry up, Stargazer," said the Captain. "It'll all look so much better when we get outside."

"Yes, sir," said the Navigator, clicking the last fastenings of his suit tight. Then, almost whispering—"But this is all wrong. It should have been what you said, sir—no more than a scientific expedition . . ."

"Don't be a fool!" snapped the Captain. "You told me yourself that this had always been your dream—ever since, as a kid, you used to read those trashy books with the gaudy covers. You've got your dream . . ."

It's been taken from me, thought the Navigator.

"You've got your dream—now quit whining. Helmets on, men. Test your radios."

There was a babble of conversation, tinny, distorted, then once again the sharp, commanding tones of the Captain.

"The first job," he told his crew, "is the marker." He turned to face the unscreened ports, pointed, his arm bloated and ungainly in the sleeve of the spacesuit. "That mound, there. About a mile away."

Two men lifted the big, square box that was the marker. Two of the others opened the hatch to the airlock, scrambled down into the little compartment, stood with outstretched arms to receive the box. They lowered it carefully to the deck.

"All right, Driver," called the Captain. "Come on out. The airlock will only hold two—and I'm being first on the Moon. The Navigator can be second—so you stay where you are, Stargazer."

"I set her down, Captain," said the Pilot in a surly voice.

"Ay—and if it wasn't for the fact that you can claim lack of practice I'd have your stripes for the job you made of it. One blast of the auxiliaries



should have been sufficient. Thanks to the way you were throwing reaction mass around we may have to lighten ship yet . . . Got the flag, there?"

"Coming down, Captain," called the Engineer, passing the long, cylindrical case to his commander.

"Then close the hatch!"

In the confined space of the airlock the two men, Captain and Navigator, watched the needle of the pressure gauge move jerkily towards the Zero of the scale.

Now, the Navigator was thinking. Now, at last. Crazy, selfishly, he thought, I've only to push him aside when the door opens, and jump . . . And that would mean, he told himself, that I should be the first man on the Moon—and that it'd be my first and only time on the Moon. Besides having twenty years or so in military prison to follow . . .

"What's wrong, Stargazer?" asked the Captain. "You look like a sick goldfish behind that helmet of yours . . . Open the door, now!"

The Navigator turned the controlling wheel, felt the click of released clamps through his thick, clumsy gloves. The door opened inwards. He stared out through the circular aperture at the glaring white plain, the distant ring craters, the black shadow of the ship. The Captain pushed past him, one bulky arm thrust through the carrying sling of the flag case. The big man lowered himself carefully through the opening, his feet searching for and at last finding the toe holds cut in the rear of the vanes. Moving slowly, cautiously, he vanished from sight. He called, "Come on. The others can send the marker down."

I could still fall, thought the Navigator. Accidentally. And be the first . . .

But he followed the Captain with as much caution as the big man had displayed, pausing for a moment on the ladder while he called to those in the ship, using his radio telephone, to close the outer airlock door by remote control so that the compartment could be re-pressurised. The last ten feet, however—the Captain was now clear of the ladder, standing arrogantly with wide spread legs—he dropped, feeling as he slowly fell that this was a dream that he had known all his life, a dream that was at last coming true.

With the Captain he stood and watched the door open again, watched the Pilot and Sparks, identified by the colours of their spacesuits, clamber down the ladder. The airlock door shut again behind them. The four men stood in silence until it opened again and the Engineer stood framed in the orifice.

"Don't forget the marker, Jets!" called the Captain unnecessarily.

The Engineer had not forgotten. Slowly, carefully, he lowered the square box on the end of a piece of line. After the Pilot had received it, unhitched the heavy cord, Jets slowly and carefully pulled up the light gantline, methodically coiling it as he did so.

"Don't bother with that *now*!" called the Captain. "We're all waiting."

At last all five men were standing just clear of the shadow cast by the rocket. It was hot in the sun. The insulation and the cooling arrangements of the suits, thought the Navigator, did not seem to be so efficient as they had been led to believe. Or, perhaps, the effect of heat was psychological rather than physical. In this glaring light, with the sun intolerably bright in the black sky, the mind expected the sensation of heat and would, unlike the instruments that had been used when the suits were tested, do its best to supply the deficiency if no such sensation were apparent.

The Captain was talking. The Navigator, still philosophising over objectivity and subjectivity, consciously heard only disjointed phrases of the oration that crackled through his helmet speaker.

" . . . take possession . . . in the name of . . ."

The leader of the expedition pulled the flag from its case, drove the sharp ferrule of the staff deep into the powdery soil. For a brief moment the folds of bunting fluttered free, for less than a second there was a glimpse of blue and white and crimson, of formal, geometric stars. Then the flag was no more than two yards of coloured cloth hanging limply from an upright stick, the colours seeming already to be fading in the fierce sunlight.

There should be an atmosphere for this sort of thing, thought the Navigator. An atmosphere. And wind . . . Abruptly he began to remember the words

of the Captain's speech, the words that, like the ceremony of the flag, were symbols of ideas.

Take possession . . . he thought. Possession. What right have we to take possession, save on behalf of the human race? We built the rocket, and we brought her here, but the ideas, the technology, behind her building and launching and navigation are the common property of all mankind. Science knows no frontiers. And neither does the dream of which we are lucky enough to be the . . . the end result?

He grinned wryly. "The dream," he whispered aloud, "is turning sour."

"What was that, Stargazer?" asked the Captain sharply.

"Nothing, sir," lied the Navigator.

"Careful, now, men," warned the Captain. "No acrobatics. Shuffle—don't try to jump. You can break a leg or fracture a face plate as easily on the Moon as on the Earth."

Sparks and Jets picked up the marker between them, followed the other three men as they trudged slowly and carefully across the plain to the slight mound that the leader had pointed out as the best place for the sign of their safe arrival.

The mound, when they came to it, had more of the appearance of a shallow ring crater. The slope up to its rim was so slight as to be hardly noticeable, but the depression in its centre was more pronounced. It was, thought the Navigator, as though some giant had blown hard and steadily down on to the thick pumice dust. *A giant*, he amended, *with very hot breath . . .* For the dust, especially towards the centre of the crater, was crusted over with a thin, brittle slag that snapped under the men's heavy boots like an ice crust on snow.

Suddenly the Navigator stopped, fell to his knees in the dust. His thick gloved hands scrambled for the obstacle that had almost tripped him. The thing, when he dragged it up into the light, was badly damaged—by his hands, his clumsy boot, by the intense heat to which it had been subjected . . . *when?*

The Captain, stooping beside him, swore bitterly.

"So we're not the first! *They* have beaten us to it!"

The Navigator got to his feet, holding the crushed and warped artifact gently.

"They?" he asked. "*They*, Captain? Who are—or were—*they*? This is, or was, some kind of instrument. As far as I can see its case is metal—and neither we nor our friends on the other side of the Curtain can afford to use metal for anything where wood or plastic would serve . . . Look, too, on the side here . . . Operating instructions? In a script that to any man on Earth would be no more than a meaningless scribble."

"We should have brought along an archaeologist," suggested Sparks, half seriously..

"Can anybody here read Martian?" asked the Pilot.

"Stop that!" snapped the Captain. "This is no laughing matter. It's serious. Somebody has been here before us, may be here now. It is our duty to find out who, and when, and why. You, Sparks and Jets, carry the marker another mile or so to the northward. To that solitary rock. If it is a rock. If it turns out to be some other damned artifact let me know at once. The rest of us . . . dig!"

For a while they found nothing further.

They had no tools but their thick-gloved hands. There were, of course, light shovels in the ship but, somehow, nobody thought of going back for them. The odd sense of urgency that now possessed them would have made the short journey to the rocket and back seem a waste of precious and fast-running-out time. They perspired heavily in their suits, soaking the woollen underwear that clad them under the armour. If any one of them worked with his back to the sun for more than a minute or so the transparent plastic of his helmet misted over.

Meanwhile, Sparks and Jets had reached the fresh site for the marker. Sparks' voice drifted tinnily through the helmet speakers. "All ready, Captain. Set to throw North, away from you."

"Good. Any further signs of interlopers?"

"No, sir."

"Then start the fuse and come back here."

As if by common consent the three diggers straightened their aching backs, watched their two shipmates trudging towards them over the glaring plain. Behind the jerkily moving figures there was a sudden, brief flare of ruddy light—a flare of light and a dense, black cloud that seemed to spread like, but much faster than, a dribble of ink spilled on clean blotting paper. But it was disappointing, somehow, unspectacular. Against the light blue—or white—or grey-clouded—sky of Earth the explosion of the container of finely divided carbon would have had something of drama—here, with no air to support the particles, with only the black airless sky as a backdrop, it lost most of its effect.

But it will be effective enough back home, thought the Navigator. Our astronomers will see it. And the others. And then . . .

"Back to the digging, men," ordered the Captain. "Sparks and Jets—turn to as soon as you get here."

"Sir!" cried the Pilot. "Captain! I've found something! A man!"

It was not a man, of course. It was a spacesuit, not unlike the ones that the explorers were wearing. It had been the property of one who was, by their standards, almost a giant, at least half as tall again as they were. There would have been some justification for the belief that the wearer of the suit was exceptional—but the three other suits turned up beside the first one were equally large.

"Whoever they are," said the Captain at last, "they're big bastards. But humanoid. Two legs, two arms, a head. But big."

"Martians," said the Pilot. "Like I said before."

"How do you make that out, Driver?"

"Well, sir, look at this . . . I suppose you could call it a crater. Take our ship away—and what have you got? The same sort of configuration. The down blast will fuse some of the pumice—and some of it will blow out and away. And if we do have to jettison unessential equipment to lighten ship—it'll be covered over as this was, and we shall be able to pick it up on our return."

"But why Martians?" asked the Captain.

"Well, sir, if there are men on Mars, men anything like us, they'll tend to be tall and spindly on account of the feeble gravity. And the men who wore these suits were tall. Furthermore, they'd be more inclined to land on the

Moon than Earth. Perhaps their ships, like themselves, were—*are*—too fragile to attempt setting down on a relatively heavy gravity planet. So they came here, and observed, and took photographs maybe—I still think that the thing that the Stargazer found is a camera of some kind—checked up their fuel and found that they couldn't quite reach escape velocity, so dumped all this stuff."

"Ingenious," said the Captain. "But if the Martians are such gangling weaklings as you imply, then these suits are far too heavy for them. Look at them. Look at the way that they've consistently used metal where a light plastic would have done at least as well".

"Perhaps they *are* too heavy," admitted the Pilot grudgingly. Then—"But, sir, they wouldn't be too heavy for them here, on the Moon!"

The Captain laughed. "Almost you convince me, Driver. Anyhow—it's not our friends from the other side of the Curtain. Unless," he laughed again, "their biologists have produced a new breed of man suitable for Lunar conditions. But I wonder how long ago it is that your Martians were here. I wonder when they are coming back."

"They aren't," said the Navigator. "This must have been a one shot affair. Come this way, sir."

The Captain followed him to the centre of the little crater, looked curiously as his subordinate fell to his knees, stirred the pumice dust with a thick-armoured forefinger.

"What are you getting at, Stargazer?"

"Just this, sir. The dust. Look at it. Touch it."

"But what . . . ?"

"Under the dust there's a sort of slag—just the same sort of slag that you'll find directly under our jets. It's thick, solid—not like the thin crust out towards the rim. And—there's at least half an inch of dust on top of it. On a world with no air, no wind. Just the slow, slow seepage of microscopic particles from the crater slopes over the . . . centuries? No, not centuries. Millenia, perhaps. Or longer."

"A pity," said the Captain. "I was rather looking forward to meeting the Driver's Martians. He gave them such a good build up." But who *were* these people?"

The Navigator moved his head inside his helmet until he found the tube of his little fresh water tank with his lips, took a short, unsatisfying sip before replying. Something—some suspicion, some fear—had made his mouth suddenly dry, drier than had the perspiration induced by the hard, physical work.

"I don't know, Captain," he said. "I don't *know* . . ."

"But you think."

"Yes, I think. I have a . . . feeling about all this. But I'd sooner keep it to myself until we have more evidence."

"As you say. But we must return to the ship soon—I'm just about dehydrated. Ah, here are Sparks and Jets to bear a hand."

Slowly the pile of salvaged equipment grew. Another, smaller camera, less badly damaged than the first one, metal oxygen—or so the explorers assumed—cylinders, two glass bottles, their labels still intact, still displaying

with clarity the queer, unreadable script of those who had left them there. A pair of binoculars, a pile of clothing that crumbled to fine powder when handled, three sheath knives still encased in a dry, brittle integument that had once been leather, a metal case full of wiring and vacuum tubes that Sparks clutched to him like a mother with her new-born infant.

It was the Navigator who found the book. A magazine it was, rather, a flimsy affair of paper that had once been glossy, of pictures that still retained some faint traces of colour. When uncovered it was open—flung down carelessly, perhaps, or, it could be, left that way by the long-dead astronaut who had thumbed with clumsy, gloved hands through its pages for the last time before leaving it as a sacrifice to inexorable Mass Ratio.

It was open at the picture of a girl, naked, reclining on what could have been a grassy lawn. There were trees in the background. There was a dog—a huge, noble animal standing beside his mistress. Under the picture were words in the unknown script.

"Look," said the Navigator. "Here's the proof. No freak of parallel evolution could have produced that woman. Or that dog. Or those trees."

"Proof of *what*, Stargazer?"

"That the people who had to lighten ship before they could return came from the Earth, *our* Earth."

"Hogwash!" exploded the Captain.

"No, sir, it's not. It was, of course, a long time ago . . ."

"So they had rockets, and photography, and printing in the Middle Ages? Is that what you're trying to tell me?"

"No, sir. Not the Middle Ages. Before the Flood."

"Come off it, Stargazer. This is too much, even from you."

"Then how else do you account for all this? Look at it this way sir. All mythologies—all—have a legend of the Deluge, of the Flood that destroyed all life save for a chosen few. Those few may have been favoured by the gods, they may have been just lucky. Whatever the way of it was—they were our forebears. And the Flood itself—was it a flood as we know it? A mere abnormally high tide, a mere bursting by some river of its bounds? Remember, sir, that all peoples, North and South, East and West, have the Flood in their mythologies. The Flood—and the legend of lost continents . . ."

"Go on."

"There was a Flood, and there *were* continents—populous, highly civilised—that are now lost. It's all part of the same story. A violent, seismic upheaval, as a result of which great land masses went down with all hands, as a result of which new lands rose from what had been the ocean beds."

"These people, if there ever were such people," said the Captain, "were scientists. They had reached at least the same level as we ourselves. One would think that they could have coped with such a disaster."

"Not if they, themselves, caused it. It is reasonable to suppose, Captain, that a certain level of technology produces both the spaceship and the atom bomb. Imagine the effect of, say, twenty hydrogen bombs exploded along geological fault lines . . ."

"But it's rather strange," said the Pilot, "that they never came back here. It's odd that this upheaval of yours should have occurred just after the first successful Lunar flight."

"Is it so odd? Perhaps they, like us, had a Curtain with two sides to it.

Perhaps they, like us, intended using this world for military purposes—and the radio signal announcing their safe and successful landing on the Moon was the detonator for the Big Bang . . .”

“Our marker,” whispered the engineer.

There was silence as all five men stared at the low-hanging globe of Earth—stared, half expecting, as they watched, that the misty sphere would burst into dreadful, Doomsday incandescence.

“All theories,” said the Captain at last, heavily. “Pick up what you can of this . . . junk, men, and carry it back to the ship. We’re only Naval officers doing a job of work—we’ll leave the fabrication of fairy stories to the scientists when we get this lot back to Earth.”

As he stooped to pick up the pair of binoculars he found something else half buried in the pumice dust. He lifted it carefully with his gloved hand. It was a bottle—this was fairly obvious in spite of its being cylindrical in shape rather than spherical. Freakishly, as in the case of the flimsy book found by the Navigator, the paper stuck to its side had been preserved through the ages. There were words in the unfamiliar script and, oddly out of place, the picture of a familiar animal.

The Captain stared at it.

“A horse,” he said at last wonderingly. “A white horse. I’d like to know what used to be in this bottle . . .”

THE END

THE LITERARY LINE-UP

E. R. James has been doing some extensive research work into the known facts and theories about the planets in our own Universe lately, and his stories are becoming more and more plausible. Some of this work is particularly evident in his long story next issue, “Ride The Twilight Rail,” which takes place in the twilight zone of Mercury.

Alan Barclay returns with a tale of the spaceways about a hard-bitten but chairborne fighting colonel, in “The Hard Way,” and, with regret, we state that the last of Ted Tubb’s planned Martian stories in the present series, “Pistol Point,” comes up. If popular demand warrants it, we’ll run some more later.

Backing these three fine yarns will be “Power Factor” by Francis G. Rayer, “Museum Piece” by John Christopher, “The Human Element” by Ian Wright, and “The Perfect Secretary” by J. F. Burke. Quite an impressive line-up.

Ratings for the November, 1952 issue were:

- | | |
|------------------------------------|----------------|
| 1. Unwanted Heritage | Charles Gray |
| 2. The Esp Worlds (conclusion) . . | J. T. McIntosh |
| 3. Of Those Who Came | George Longdon |
| 4. Weapons For Yesterday | Stewart Winsor |
| 5. Where No Man Walks | E. R. James |

Given a race whose cultural background does not comprehend Earthly methods of buying and selling, how influence them to sell certain commodities they own — when they do not require other goods in exchange?

... IS NO ROBBERY

By LAN WRIGHT

Illustrated by CLOTHIER

Johnny Dawson walked up the steps leading to the main entrance of the giant SPACE building, his eyes wandering unconsciously to the huge carved letters over the columned doorway that read, impressively, "Spatial Projects & Colonial Exploration." SPACE for short.

He passed out of the brilliant noonday sun into the cool, shaded hallway beyond the entrance, his hand fumbling automatically for his pass. The armed and uniformed guard at the desk took it and placed it under the fluoroscope at his side. He read off the numbers which appeared and checked against a card which he took from an index next to the fluoroscope. Dawson paid no attention, the routine was now something that was irksome rather than interesting, as it had been once upon a time, and he was really only concerned with the reason behind the hurried summons which had interrupted his leave in the South of France, and his progress with a certain nicely curved blonde who had been both cool enough to be interesting and warm enough to be enticing.

"Room four one three on the fourth floor," said the guard, handing back the pass, "You are expected, sir."

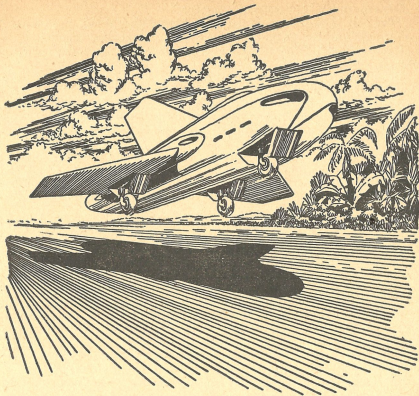
Dawson nodded absently and made his way leisurely to the bank of lifts at the rear of the guard desk, he stepped into one which was standing empty and pressed the button for the fourth floor. There he stepped out and turned left, moving with easy familiarity towards a glass panelled door some twenty yards along the broad corridor, which was endorsed "413" in large gold letters, and underneath, cryptically, "E.S.A.M.S.O." Dawson read automatically "Economic Survey and Material Supply Officer."

He went in without knocking, and the efficient brunette at the desk looked enquiringly at him.

"Dawson, honey. I'm expected."

"Oh, yes, Mister Dawson. Mister Hendrix is expecting you, you can go straight in."

He eyed her appreciatively, "You're fresh here, aren't you?"



She raised one eyebrow and returned his gaze coolly, "So are you, Mister Dawson. That is the door."

Dawson grinned and murmured, "*Touché*," before knocking and going through into the inner office.

Hendrix was looking at the door with cold-eyed intensity as he entered, and Dawson knew that look of old; he crossed his fingers mentally as he closed the door, that look on Hendrix spelled trouble, and usually for anyone but Hendrix.

"Sit down, Dawson," Hendrix's voice boomed at him. "Glad you made it so fast."

Dawson dropped into a deep leather chair before the desk, "I couldn't wait to see what you'd got in store for me, boss," he replied evenly.

Hendrix ignored the quip, "What do you know about mellathium?" he snapped.

Dawson wrinkled his brow thoughtfully for a moment, "Some sort of metal, isn't it?" he suggested at last.

Hendrix leered disgustedly, "That's what I like about my top operators. They don't know anything they're supposed to. Well, mellathium is a radio active metal with a half-life roughly twice that of radium, and an atomic weight around the three fifty mark."

Dawson whistled but made no comment.

"The only known source in the Solar system is on Venus, and we use it as the power source for the VM type starship," continued Hendrix.

Dawson stirred, "Thanks for the lecture, boss, but get to the point will you?"

Hendrix waved him to silence with a large, hairy hand, "I'll get there. The VM type ship is mankind's only hope, at present, of reaching the stars and staying there, because it is the only ship capable of ultra light speeds, and it is only capable of them because of mellathium. Without it the ship is a heap of junk, but with it the stars are on our doorstep."

Dawson was quick enough to realise that if Hendrix was worried about the VM ship, then someone above him was worried about it as well, and whatever worried Hendrix's senior would inevitably worry Hendrix's junior, in this case himself. He stirred uneasily, and waited for his chief to go on.

"The source of mellathium on Venus seemed to be a big one, enough to last us for twenty or thirty years at least, that is until we had found either another type of drive or another field of mellathium."

He sat back and swivelled his chair away from Dawson until he was looking out of the window across the sun drenched vista of the city.

"We had a secret report from the engineer in charge at Venusport," he went on, "a fellow named Logan. The lode is running out, and running out fast. The expectation of supply at the present rate is less than two years, so that inside that time there won't be enough mellathium in the system to lift my kid's scooter off the Earth, let alone a VM ship. That is the problem, Dawson," he swivelled his chair back, and fixed his deep, black eyes rigidly on Dawson. "That is our problem, or rather, it is your problem."

Dawson blinked and opened his hands expressively, "I'm no prospector, boss, I wouldn't know where to look," he complained.

Hendrix smiled amiably, "Oh, we've done the hard part," he replied. "We've found another deposit, in fact we've found a whole planet riddled with it. We've known about it for some time, but we didn't need it, now we do."

Dawson's eyes and lips narrowed with suspicion. He knew Hendrix of old. "That is where I come in, I suppose?" he asked.

Hendrix nodded, "The planet is the only one of the star Alpha Scorpio, and as I said, it has enough mellathium to keep us happy for a long time.

"As soon as we heard about the failure at Venusport we sent a mission there to negotiate for supplies. They have been gone for ten weeks and each week they have sent a report which read, simply, 'No progress.' Yesterday we received their full report. They're up against a brick wall and they are getting precisely nowhere; in other words, they haven't got the mellathium."

"Perhaps they didn't ask nicely," suggested Dawson.

Hendrix glared angrily, "This isn't funny," he snapped, and Dawson arrayed himself in an air of suitable humility.

"We didn't get it," went on Hendrix, "because they saw no reason to give it to us. We offered them food, machinery, precious stones and metal, everything we could think of, but the mission is stuck, they've called for further instructions and the baby has been passed on to me. I've sent for

you because your major standings are in racial psychology and stellar economics. In their report the mission makes strong reference to the peculiar psychological approach to things which the Dareens, that's the race they've been dealing with, have got, and also of the fact that their economy does not base itself on a system of barter."

He picked a large leather folder from the side of his desk. "Here is the full report, Dawson, there is a ship leaving for the Scorpio system at midnight G.M.T. tomorrow from Lunarport. You will find all the necessary details have been arranged, all you have to do is get aboard. That is all, you've got a free hand—but get that mellathium."

Dawson took the folder dazedly. "That's all," he repeated, unbelieving, "hell, I've had some fast shuffles from you, boss, but this beats the lot. I don't know—"

"You know as much as I do," broke in Hendrix, "And you can read that report during the trip, that'll give you all the grounding you'll need. Besides the mission is still there, they will put you wise. Just one thing—no trouble if you can avoid it."

The door of the office was closed before Dawson realised he was outside. The brunette eyed him questioningly.

"Is something the matter, Mister Dawson?" she enquired.

He managed a tight smile, "Not a thing, honey, not a thing, you're just perfect. Remind me to look you up—if I get back."

The planet lay below them, a greenish grey globe, luminescent against the blackness of space, it was turning almost imperceptibly as they approached it.

The ship had come out of space drive some ten minutes earlier, and as he was a privileged passenger Dawson stood in the main control room looking out of one of the large view ports at the world which was his destination.

It looked very much like Earth at first sight, and then when he looked closer he realised that it was quite different. The main land masses were oddly and irregularly shaped, and seemed concentrated at the equator. Alien was the word that Dawson gloomily applied to it, although he had to admit that even in its strangeness it was beautiful. Seen from space Earth had a solid workmanlike compactness about it, a firm outline that was clear and stark; it looked what it was, the home of an industrious progressive race. But this planet had an ethereal mistiness which made it seem a trifle unreal, a dream which floated in space and which would disappear with a breath cast in its direction.

Dawson's face displayed his gloom like a badge of office, he had spent the twelve days which the trip had taken in going over the trade mission's report time and time again, and even now he was little wiser than when he had left Hendrix's office.

The head of the mission, a man named Flynn, had offered every practical inducement that he could to persuade the Dareens to part with the precious lode, but all to no effect. Apparently, they had welcomed the mission with open arms, and had treated them as honoured guests, in fact, wrote Flynn, they had seemed almost sorrowful that they had to refuse the Earthmen's offers. While in most things they were an eminently reasonable people, there were some things, and this was one, over which their outlook, while

not entirely alien, was psychologically different. It was this difference which had made progress so difficult and so slow.

Flynn's final paragraph was one of admitted puzzlement and frustration. They had been fed, clothed, housed and well looked after during their long stay; all the fruits of a rich world had been lavished on them in abundance, everything was there for the taking, but their hosts had neither asked for payment nor suggested by the slightest hint or word that they ought to think about leaving. It appeared that they could stay for ever if they so desired and no one would mind in the least.

So-what now? Dawson grunted in disgust. As far as it went the report was worse than useless, it told him nothing except that the Dareens were extremely easy to get along with—until the subject of a trade pact was brought up, and then they dug their heels in and refused to budge. He grunted again, louder this time.

"Indigestion, Mister Dawson?" asked the first officer politely.

"No, I only wish it was," returned Dawson irritably. He paused looking down at the world below, "Say, Lewis, tell me about that planet down there. We'll be landed in a couple of hours, and I'd like to know a bit about what I'm landing on."

Lewis came and stood beside him, "Most beautiful world I ever hope to see," he said. "Not like Earth, of course, but it's the sort of world men dream about. They say there's no place like home, but if I ever get a chance I'll settle here like a shot."

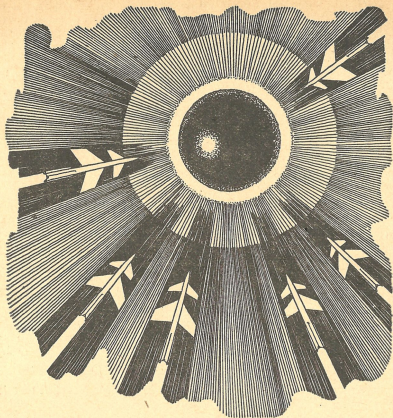
"Not while Emigration has the last word," remarked Dawson.

Lewis smiled wryly, "That's what I mean, if I ever get the chance. The climate is perfect, except at the poles, and weather such as we know it on Earth is unknown here. They have rain, but only at night and then it is just gentle showers, and they have no gales or storms or hurricanes—I believe that is because they have no satellite and therefore no tides, and they haven't any mountain ranges to collect clouds either, so that rain only comes as a result of temperature changes—at night, that is. There is no axial wobble so the sun is in the same place all the year round, and naturally that has affected the life of the people, they live only on those portions of the planet which suit them and I don't suppose for a minute it has ever occurred to them to go further north than the temperate regions."

"Tell me about the people," said Dawson.

Lewis shrugged, "Not much to tell, they're humanoid, but taller and slimmer than we are, more fragile somehow, and they move with a peculiar grace that I've never seen in a human of their build. On the whole they are exceptionally good looking by our standards. From what I've seen of them they aren't ambitious, either as individuals or as a race, they have no commerce or industry and they live in small rural communities of about three or four thousand. They have a form of government, though I don't think our people have been able to find out how it works, certainly it isn't like any form of government we have on Earth, in fact its only function appears to be to distribute the produce in fair and equal proportions all round so that the whole population is kept supplied with whatever is being produced."

"I've heard about that," broke in Dawson. "Trading as we know it doesn't exist here, does it?"



"That's right," affirmed Lewis, "everyone does something, makes clothes or grows food, or performs some other task which he or she likes doing, and as far as I can gather whatever they produce over and above their own individual or family needs they turn over to the local chief and take something they need in return."

"But surely that's trading?" objected Dawson.

"Not the way they do it. It's worked on quite a voluntary basis, anyone can go along and take what they want without putting anything in by way of return. I heard of one of them who was building his own house, he just went ahead and did it, taking what materials he needed from the common pool and feeding and clothing himself and his family at the same time. Some of his friends came and helped him when they felt like it. He got his house in a few weeks, furniture and all."

"But, dammit, a system like that can't work," protested Dawson, "It is an economic impossibility for them to produce all they need as a race in such a slap-happy manner, there must be more to it than that?"

... IS NO ROBBERY

Lewis laughed outright, "I can assure you there isn't. You've got to remember that there is only one race on this world, not several score, therefore there are no boundaries, no tariffs, no taxes and no trade, and what is more important they have no internal conflicts to drain their resources like we had not so long ago."

"Sounds too good to be true," said Dawson. "No wonder they've no ambition, they haven't anywhere to go."

"That just about sums it up," nodded Lewis looking at his watch. "You'll have to excuse me now, we shall be landing soon, and I think you ought to get your things together."

"Guess you're right. Thanks for the information, lieutenant, I'll buy you a drink when we land."

"There isn't any and if there was you couldn't buy it."

"Oh, sure," growled Dawson, "I forgot, this is Utopia."

He watched the landing from his cabin port. The ship came down in a big, grassy field not far from one of the largest of the communities. It was large only by reason of the space it covered, for Dawson could see that each separate building stood in its own square of land, like a collection of smallholdings all bunched together. As far as he could make out the buildings were all single storied and made of timber thatched with leaves and dry grass.

He left his cabin almost as soon as the ship had come to rest, and carried his suitcase down the landing ramp, at the foot of which a small group of Earthmen had already gathered. He figured them for the members of the mission and studied them keenly as he walked the few feet to the ground. As he stepped off the ramp one of them detached himself from the group and came towards him.

"Dawson?" asked the man holding out his hand.

"That's right," he replied grasping it with his own. "You must be Flynn?"

Flynn was a lean, sinewy figure with stooped shoulders and a benign face under a mane of white hair. His eyes were blue and penetrating with a shrewdness which was otherwise belied by his general mild appearance. Dawson decided he liked him at first sight.

Flynn introduced him briefly to the four others who stood a few paces behind him and then led him off towards the settlement.

"I've heard a lot about you, Mister Dawson," said Flynn as they walked together across the field, ankle deep in thin, wispy grass. "I was very pleased when I heard that Hendrix had decided to send you out to help us."

Dawson smiled at the implied compliment. "I only hope I'll be able to help you; from what I've heard it's a tough business."

"You're right about that," nodded Flynn. "We've tried everything we can think of, and, frankly, I'm beaten. If they would only say what they wanted it would help, but they admit quite openly that we have nothing which will tempt them, at least that is the impression I always get. On top of that they are always so darned apologetic over the whole business. I even offered to mine in prepared areas so that they will not be disturbed by the operation, but the Chief Elder just thanked me very sorrowfully for our kindness and declined, then he showed me his collection of pottery."

"He did what?" yelled Dawson.

Flynn smiled at his astonishment. "That's right. This race, as you probably know, is not an industrious one."

"So I've heard," growled Dawson.

"But they are artistic. They love anything of beauty. Pottery, painting, music, poetry, why some of their work would be worth a fortune on Earth. Their paintings knock Rembrandt or Vandyke into a cocked hat, and all they use are extracts from plants for their colours. Their music, too, is like nothing I have ever heard before."

"I can see I'm going to have quite a time here," said Dawson. "I can go out and smell the flowers and read poetry in my spare time. I'll bet they never heard of night clubs."

"I'm afraid not, but I think you'll like it here when you settle down."

"When I settle down? How long do you think I'm going to be here?"

Flynn smiled. "I'll take you to see the Chief Elder in the morning; perhaps you'll get some ideas. I told him you were coming, and he is most anxious to meet you."

"Oh, what did you tell him?"

"That you were a very important person on your own world and that you had come a very long distance to speak with him. That went down well for it is quite an honour here for a person to think enough of someone to visit him. They set great store by such actions."

The house in which Dawson spent his first night on the planet, Dareen, was a typical one-storied, wooden hut with a leaf-thatched roof. It had three rooms, each of them furnished with a wonderful variety of carved wooden furniture and ornaments. Each table, each chair and each ornament seemed to have an orientation of its own which made it a separate and distinct entity within the whole. Even the woven rugs on the floor seemed to say, "This is my house, it was created for my own setting and my own pleasure." And then you looked at something else, a beautifully carved table, and you felt the same thing. Each article was different, so different that Dawson's eyes seemed incapable of taking in all the beauty and variety which was laid before them. Flynn noticed his silent, eager inspection.

"I know how it strikes you," he said sympathetically. "I've been here three months and more and it still has that effect on me."

Dawson turned wondering eyes towards him. "I'm beginning to see what that officer on the ship told me. He said it was the most beautiful place he'd ever seen."

"Well, if you put out the lamp on the table you won't be able to see it all; that way you'll be able to sleep," replied Flynn. "I have arranged for one of the local girls to bring you food from the next house. I expect she'll be in soon, she probably saw us come in."

"Will you eat with me?" asked Dawson.

"No, you'll want to sleep afterwards, and I must see the Elder and arrange about to-morrow's meeting."

"All right, have it your way. Good night, Flynn."

Flynn had hardly gone out of the door when from the back of the house came a girl, so silently that Dawson almost jumped out of his skin as he turned slowly from the door and found her standing there. She was tall,

as tall as he was, with a dark, soft skin, and long, beautifully waved black hair. It was so black that for a moment Dawson wondered if it had been dyed, but the thought was so obviously out of place that he discarded it at once. Her eyes, too, were deep pools of blackness, yet with a dancing depth to them that he had never seen in earthly eyes. Her figure was taller and slimmer than would have been acceptable on Earth, but Dawson realised as he looked at her that she had a grace of movement and a suppleness which made any Earth girl he had ever known seem like a baby elephant by comparison. He realised that she was lovely beyond his expectation of female loveliness.

She smiled at him from a thin, wide mouth, a mouth that would have been ugly if it had not been thin and wide, and she gestured wordlessly with one slim hand towards the back room. It was a gesture that carried with it all the rhythm and beauty of a goddess. It was a movement which Dawson wanted to see again and again, a movement of which he would never tire. It was as if she were offering him the entire world for his pleasure rather than the simple repast which he knew would be waiting him in the back room.

He had to shake himself out of the almost hypnotised stupor into which he had sunk, and smiled sheepishly in return. She gestured again, a tinkling note of invitation in her voice as she added its flowing beauty to the movement of her hand and arm. Dawson followed her into the back room.

He slept soundly that night in an alien bed of thick warm fleece, and in the morning the same girl was there to waken him and prepare his food while he washed and shaved in a wonderfully carved wooden bowl. So beautiful was it that it seemed almost like sacrilege to soil it with water and the scum of his shaving lotion. Breakfast was as good as the previous meal, most of it was fresh fruit and vegetables prepared in various tantalising and succulent ways, and he reflected as he ate that the girl could have asked her own fee as a chef in any one of the great hotels on Earth.

Flynn came in just as he was finishing his meal.

"I've fixed with the Elder to see you as soon as you like," he said. "He is most anxious to meet you."

"Sooner the better," answered Dawson, "though after the two meals I've had here I'm in no hurry to leave."

Flynn smiled. "That is rather different from your statement of yesterday."

"I am beginning to suspect that your failure is merely an excuse so that you can stay here as long as possible," remarked Dawson, rising from the table.

"I'd like that to be the reason, Dawson, but I'm afraid it isn't. I had another go at him last night, just in case, but I'm afraid it's no good; he was politely, sorrowfully adamant. He said that it was nice of us to offer but they couldn't possibly accept."

"By the way, it struck me last night, how do you go on for an interpreter?" asked Dawson.

"Oh, we've taught one or two of them to speak English. The early explorers started it, and we finished it off. The Elder is quite proficient now. It's rather remarkable really because they have only ever had one race and one language on the planet, and I doubt if they ever considered the possibility of there being more than one group of sound patterns for com-

munication until we came along. In the circumstances they have made really remarkable progress."

Flynn fished in the large pocket of his jerkin and brought out a metal cup which Dawson recognised as one of the drinking containers from the starship.

"By the way they have a custom here that when you visit a person you take him a gift; it is considered very bad manners not to do it. It hasn't bothered us a great deal because anything of metal is a novelty to them and it doesn't cost us anything."

Dawson weighed the cup in his hand. "What happens when you run out of cups?"

"I guess we'll find something else," returned Flynn with a smile.

"Well, if you say so—" Dawson put the cup in his own pocket and together they left the hut.

They walked for some three-quarters of a mile through the settlement, passing through beautifully wooded glades and along flower-bordered paths which ran between the individual patches of ground, in the centre of each of which stood a house. It was like a patchwork quilt, reflected Dawson, each piece of ground representing one of the patches and the whole amounting to a rich fantasy of colour and floral beauty. They passed many of the inhabitants on the way, some working in their plots, others strolling idly in the early morning sunlight. The women were all tall and beautiful like the one who served him the night before, but he noticed that they were all of the same type, dark-skinned and black-eyed with long flowing hair; there was not the variety of style as there was on Earth. The men, too were tall and dark and extremely graceful, they seemed to glide rather than walk with a flowing easiness that made his own body feel clumsy and unwieldy.

As they walked Dawson found that he was not listening to Flynn's conversation, he was, instead, losing himself in the dreamy wonder of the beauty around him. The blue sky with fleecy white clouds which moved serenely across it, the greenness of the trees and the grass, and the beauty and variety of the strange, exotic flowers which bordered their path. The beautiful strains of the birds as they sang in the tall, swaying trees, songs which no earthly bird could have emulated. He was quite unable to describe it all, either to himself or, if he were asked, to anyone else; he could only watch and listen and wonder, and still have space to feast his eyes and wonder yet again.

He would have missed the house altogether had Flynn not caught his sleeve and pulled him back to reality.

"We're there," he said.

"Oh, sure." Dawson flushed as he saw the slight grin on Flynn's face. "Just thinking," he added lamely.

"I know how you feel," said the older man. "I went through it at first, and even now I have to watch myself. You'll get used to it in time."

They walked up a flower-lined path to the house, which was a little larger than the others and a little more elaborately built. It was as if the Elder had wanted a mark of his rank and status and had chosen this unobtrusive way of displaying it. They were greeted at the door by an elderly woman, one whose hair was showing streaks of grey. She bowed at the sight of them and said,

in broken English, "Andar expects you and begs you to enter his humble home."

They passed through and followed the woman from the entrance to the large back room, where she paused and gestured for them to go through.

The room was larger than any that Dawson had yet seen. He estimated that it must take up nearly half the house. It was unique in that the bulk of the furniture consisted of chairs, of which there were about twenty ranged along two sides of the room. In front of the chairs as they stood in two rows were two long beautifully carved tables.

At the far end from the entrance there was a large divan raised on a low dais above the rest of the floor, and from the divan as they entered rose an old Dareen. Flynn muttered "The Chief Elder" out of the corner of his mouth, and led Dawson across the floor.

They stopped in front of the dais and Flynn bowed slightly to the smiling figure standing a trifle above them and bowing in return.

"Greetings, Andar," said Flynn. "I have brought my friend Dawson to you as I promised when last we met."

Andar bowed again, and replied: "I give greetings to my friend Flynn, and to his companion Dawson; may the blessings of our world rest lightly on your shoulders." The voice was high pitched, yet with a mellow tone; it flowed easily and gave to the stilted words a tinkling beauty and a meaning which was sincere and deep.

Dawson stood for a moment awkwardly, and then Flynn rescued him from his dilemma by saying: "My friend has brought you a gift, Andar, for he has heard much of your customs, and wishes to show his appreciation for your hospitality."

Dawson stepped forward, blushing furiously, and held out his right hand, offering the metal cup to the Elder. He felt more than a trifle foolish, for the gift seemed so ridiculously inadequate as to be almost ludicrous, but the beaming smile which lighted Andar's face left him in no doubt as to the pleasure with which it was received.

"I am honoured beyond words, and my thanks can only be repaid by the hospitality which I can offer you. I pray you, be seated." He waved them to two chairs which stood beside the divan.

As they sat down Dawson decided that he would get straight to the business which was the reason for their visit, for he had an idea that Flynn's usual method was to talk about something else for a while and then gradually lead up to the question of the mellathium.

He coughed a trifle nervously and said: "Andar, I think that Flynn has told you of my reason for coming so far to visit you?"

The Elder showed some surprise, he lost his smile and made it quite plain that Dawson's assumptions were correct. Glancing quickly sideways Dawson could see that Flynn, too, was taken aback.

The Elder nodded.

"My people wish to have supplies of a certain rare metal which is to be found on your world, Andar, and we are willing to give you anything which you desire in return. I have no wish to offend your hospitality, but it is of vital necessity that we come to some arrangement as quickly as possible. If you like you can begin by telling me why Flynn has not been able to



reach some form of agreement with you, and perhaps we can go on from there. But I must ask you to consider our offer most deeply for it is vital to Earth that some arrangement be forthcoming in the near future."

As he finished speaking a shadow seemed to pass over the face of the Elder, he lowered his head and looked sadly at the metal cup resting in his lap. He sat quietly for a minute without speaking, then lifted his head and looked at the two Earthmen with an infinite sadness on his face. He lifted the metal cup in a pitiful, almost helpless gesture as though he were about to return it, then he laid it back on his lap.

"Your gift fills me with pleasure, Dawson," he replied slowly, "but it also fills me with sorrow and pain that I am unable to accept your generous offer of assistance. My heart is grateful, yet it is a thing I cannot take, your gifts are generous beyond words but still I may not accept."

Dawson blinked in astonishment, the reply did not make sense to him, it was as if he was offering Andar the whole Universe on a plate instead of asking him for something. He looked at Flynn sitting beside him, but the

man was quietly, easily immobile, a slight smile on his face. He realised that Flynn had been through it all before, probably many times over, and he had known what was coming. No wonder he showed no surprise.

"But Andar—" he flapped one hand vaguely towards his host, and then let it fall back to his side. The truth was that he could find nothing to say. The reply to his demands was the last thing he had expected, downright refusal, yes, but this—

"I'm not taking anything," he burst out angrily, "I want to buy it. Dammit," he turned on Flynn, "You know what I mean, tell him."

Flynn addressed Andar in an apologetic voice as he said, "My friend is upset that you should refuse. His words are prompted by his emotions, they are not meant harshly, Andar."

The Elder bowed gracefully in his seat, "I am distressed that I should make him unhappy, but you know, Flynn, that I cannot accept, I have told you before and each time I am desolate, for you are my friend."

Dawson watched the pantomime with mounting rage and frustration, from surprise and bewilderment he was passing to angry disgust, disgust at Flynn for so openly siding with Andar and anger at the idiotic turn which events seemed to have taken. He spluttered uncontrollably, but before he could make a further outburst Flynn rose from his seat, dragging him up as well. He bowed to Andar. "The time has come for us to leave, Andar. We are sorry that our visit has been so short, but we shall come again, Dawson and I."

The Elder bowed in return. "I am honoured at your company and my house is yours whenever you wish."

Dawson found himself being propelled gently but firmly towards the entrance, Flynn's actions taking him so by surprise that he made no effort to resist, and he was outside almost before he realised it. He had no opportunity of speaking before Flynn remarked mildly, "You nearly lost your temper there."

Dawson opened his mouth to make an angry retort and then shut it, his words unspoken. Flynn was right, he had been on the point of saying a good deal more than he should, and only his companion's intervention had saved the situation from deteriorating. Now that his temper was cooling he realised how close he had come to alienating entirely the friendship of the Dareen Elder, and any good which Flynn had made during his stay would have been damaged irreparably.

"Yes, I think perhaps I did," he replied after a pause.

They walked slowly away from Andar's house.

"I've been dealing with Andar and his people for nearly three months," went on Flynn. "I've had all that he said told to me time and again. At first it annoyed me too, but I managed not to show it and now it has become almost a ritual. I go, I ask, Andar refuses and then we talk about his pottery. Our meetings are usually longer than the one we just had, but you managed to cut it short." He smiled at Dawson who grimaced in return.

"It just didn't make sense to me. He acted as if we were doing him a favour. All I offered to do was pay him for it."

"Now you see what we have been up against. I was hoping you might have a fresh approach."

"Yeah, and I don't like it," brooded Dawson. "If you haven't succeeded in three months how the hell am I going to get any further?"

"You won't, not by offering to trade," replied Flynn. "I gave that up a long time ago. I've been working on the indirect line for some time, trying to arouse their interest in the universe around them. Andar is a clever old bird despite his non-scientific background and upbringing, and I have been trying to get him enthusiastic over space travel and the VM ship in the hope that by arousing his interest sufficiently we may be able to get him to co-operate willingly with us."

"Breed enthusiasm in him so he just has to let us have what we want," Dawson nodded. "I get the idea, but what is the reaction?"

Flynn shrugged. "Everything goes fine until I start asking about the mellathium, and then the curtain comes down."

They walked in silence for some minutes, and then Dawson thought back to something Lewis had told him on board the ship.

"As I understand it," he said, "the Dareens have no knowledge of trade or barter in any shape or form?"

"That's right."

"Then, unless my psychology is all to blazes, we'll never get anywhere with them the way we're going on. One of the first things I learned in racial psychology was that you can't change the hereditary nature of the basic economics of a race."

"I never knew that," Flynn said, his eyebrows elevated in surprise.

Dawson nodded. "It's right enough. Look at Earth; our basic economy is based on the trade and barter system. What we need we pay for, or we give some other commodity in exchange, and that way everyone is happy. Think for a minute what would happen if we changed that system for the one in operation here."

"I can hazard a good guess," replied Flynn.

"Exactly, in a month the world would be a bankrupt wreck, with everyone grabbing as much as they could of everything for as long as they could grab it. Even if you tried to introduce it slowly it would need a complete change of our present industrial system, and even then it is doubtful if it would work. Now, think of the reverse happening on this planet. It's a ninety-nine per cent certainty that the same thing would happen."

"And so—what now?" asked Flynn.

Dawson sighed, "Frankly I don't know. I'll think about it for to-day and go and see Andar again to-morrow, maybe I'll get an idea."

He went to see Andar again the next day and was cordially received, but profiting from his earlier experience, he made no attempt to talk about the mellathium but kept the conversation on general lines. They talked mainly about Earth and its peoples, a subject which Andar found fascinating, since he was unable to conceive a world in which a score of different races lived on equal terms. His experience was only of his own world, where his people were the only people and their tongue the only tongue. His active mind was able to take in the differences and conflicts of people of Earth, and he made a shrewd remark when he said:

"I think I can see what you have to contend with on your own world, Dawson. I have now the power to speak your language, and it is a power

which is strange to my people, yet I can see that it is a common thing on your world for a man to speak with many tongues and also with many meanings."

Dawson stayed for two hours and when he left the subject of the mellathium had not been mentioned.

He found Flynn waiting for him when he returned to the house.

"How'd you make out?" were his first words.

"I never mentioned the subject," grinned Dawson.

Flynn nodded. "I tried that some time ago," he said.

"Tried what?"

"The indirect approach, try to make him like you so much that he can't refuse."

"It didn't work, eh?"

"You wouldn't be out here now if it had."

Dawson shook his head in disgust. "Well, I'll keep plugging."

He kept plugging for a week, and then two, and finally a month had gone by while Andar greeted him with obvious pleasure and accepted the gifts he took with smiling delight, delight which turned at once to sadness if Dawson mentioned, as he often did, the subject of mellathium.

For all that Dawson found life on the planet entrancing. He found a peace which he had never known on Earth, a peace which had it been offered earlier, he would have declined scornfully. The casinos and beaches of Monte Carlo and the cabarets and bars of New York had been his relaxation, anywhere where there were bright lights and harsh music and synthetically beautiful women.

He dallied, half-humourously at first, with Saren, the girl who looked after him, a dalliance which later assumed such significance that he had to curb it. Her beauty was too much for him to cope with, and he realised after a while that his worldly-wise heart was not proof against the naive innocence with which she returned his advances. Her own reaction to the ultimate break was, to his reluctant pleasure, as light-hearted as had been her approach to his advances. He was pleased because he had not wished to hurt her, but the pleasure was reluctant because his pride was hurt that she could cast him aside so lightly.

He grew to like Andar more with each visit and their talks together each day became a regular habit to which each of them looked forward with pleasurable anticipation. Flynn attended many of them, but for the most part he was content to take a back seat and await results. Results which never came.

Three days before the next ship from Earth was due Dawson returned late in the evening from a meeting with Andar, and he called on Flynn as he made his way home.

"I'm leaving on the next ship out," he announced quietly.

Flynn said nothing.

"I've done all I can here, but it's no use—Andar treats it now just as he did six weeks ago. I hate to admit it but we've failed, myself probably more than you because I was supposed to be the specialist."

"So what's the next move?" asked Flynn.

Dawson shrugged. "Three heavy cruisers and a few thousand troops.

ought to see it tied up in a month at the most, then we'll have all the mellathium we want," he replied bitterly.

Flynn stirred uneasily, "You've forgotten the Exploration Bill," he said, "Clause three states . . ."

"That no hostile or forcible action shall be taken by Terran forces to the detriment of alien races and their natural surroundings except that it be in ultimate defence of life and property," finished Dawson. He laughed harshly and sarcastically. "Don't fool yourself, Flynn; when this thing gets known on Earth do you think that'll stop them? Not on your life. In three months that Bill will be repealed and the ships will be on their way. The World Senate won't let a little thing like an obstructive Bill stop them from conquering the stars."

Flynn pursed his lips and made no answer. Dawson was right, he knew that. He had always known it would be so some day, but until now the Exploration Bill had only made Man feel good, it had not stood in his way. Mankind's ambition far outweighed his desire to feel good, and the Bill would be scrapped just as fast as was possible. After that—

"I'm sending my report off in the morning," went on Dawson. "I should have a reply before I leave. Perhaps you'll have some orders too."

"I think I've known from the very first day that this would happen," said Flynn sombrely. "I just wouldn't believe it, that's all."

"Just wouldn't believe it because you fell in love with the place, like me," snarled Dawson.

"And the people," added Flynn with a slight smile in his direction.

"Yeah, and the people." Dawson's lips twitched and his voice shook with savage emotion. He was gone out through the door and into the night before Flynn had time to stop him.

As he had anticipated Dawson received orders to report back on the next Earthbound ship, but Flynn was told to stay and pursue his objective until further action had been decided.

On the morning of his departure Dawson paid his last visit to Andar. He walked up the short path lined with flowers and in through the open door, passing, as he had done a score of times before, into the large back room where Andar was seated on his divan.

"This is my last visit, Andar," he said sadly, as he seated himself before the Elder.

"I know, my friend, but do not be sorry, for we have both gained something that will not easily be lost."

Dawson sought a suitable reply but the words stuck in his throat as he had a momentary vision of a squadron of heavy cruisers diving through the white clouds and loosing their destructive blasts on the beauty of the planet below. He fumbled in the pocket of his coat and pulled from it a slim volume, leather covered, which he handed to Andar.

"This is my last gift, Andar," he said. "I hope you will treasure it. It is the written philosophy of some of the greatest of our Terran poets. I thought you'd got enough metal pots," he added with a smile.

He did not say that he had scrounged it from one of Flynn's juniors the night before, and that it was the only thing any of them would let him have that was a suitable gift. Four months of gift taking had seriously strained the mission's resources.

Andar studied it with interest. "I shall find great pleasure in this, my friend. I shall treasure it more because it is your last gift for me."

Dawson's heart twisted at the remark, and he felt tempted to tell Andar how ironically right he was, in a few short weeks his name would be reviled by the Elder and his people when they saw what the Earthman would do to their world.

"Perhaps one day you will visit me on Earth," he mumbled lamely.

"I should be honoured and pleased to come, and it may be so before long," replied Andar with a smile. "I shall be glad to accept your hospitality."

Dawson rose and stood awkwardly, hardly knowing how to break his visit and get away from the house and his host, and the memories, and it was Andar who helped him out, as he too rose and bowed slightly to his guest.

"I must not keep you, Dawson, for I know that you must be anxious to return to your own people. I bid you farewell and a safe return."

Dawson gulped and bowed hastily. "Goodbye, Andar," he said, and turning, walked quickly from the room, glad to get out of the house as fast as he could.

Four hours later the ship left for Earth.

His welcome by Hendrix was not ecstatic. There were no recriminations and no excuses called for, but he knew that failure was not lightly received in higher quarters and the knowledge weighed heavily on him. Hendrix sent him on his uncompleted leave with instructions to "Rest up and forget the whole business, after all it's just one of those things."

His leave began, not only under the shadow of his failure, but under a despair such as he had never known in his life before. The repeal of the Exploration Bill was on the floor of the World Senate.

He plunged desperately into the mood of his earlier vacation, striving to drive from his mind the images which haunted him. He sported on the white sands of the South of France in the daytime, and drank in the casinos at night, but in the white sands he could only see the beauty of the Daren countryside, and in the casinos the cool house of Andar, and in the shadowed eyes of the woman the dark beauty of Saren.

The black mood which enveloped him grew deeper as his leave progressed, and it was only broken by a sudden summons from Hendrix to report back at once. So thankful was he for the break that he took the next jet out, leaving instructions for his clothes to be forwarded.

The Space building was just as he remembered it from two previous visits, the guard had a different face but the routine was the same, and he found himself pushing open the door to Hendrix's office to find the same trim brunette eyeing him suspiciously.

"Dawson, honey," he smiled.

She noted the grin with an inexplicable pang, for it was a sad, wistful twist to a down-turned mouth set in a thin drawn face. It was not the racy, impudent smirk she had expected.

"Mister Hendrix is expecting you, Mister Dawson. Go right in."

He opened the inner door and saw Hendrix at his desk bent over a pile of papers. He walked over and sat down without being asked.

"Hi, boss," he said after a moment.

Hendrix looked up and eyed him interestedly without replying. Dawson

coughed awkwardly and looked away under the intense scrutiny remarking, "You didn't ask me here to admire my beauty, what is it?"

Hendrix smiled and leaned back in his chair, "No, I didn't. I thought you might like to know that Flynn arrived at Lunarport on the Scorpi cruiser yesterday. He's got clearance for White Sands to-day, should arrive this evening."

Dawson was surprised, both at Flynn's sudden arrival and the fact that Hendrix called him all the way from Cannes just to tell him that.

"That isn't all," he returned suspiciously.

"No, as a matter of fact he's got someone with him," replied Hendrix reaching for a cigar, "A guy named Andar."

"Andar!"

"Uh-huh." Hendrix blew out a cloud of smoke, "Apparently you invited him to visit you on Earth."

"Sure I did, but I never thought he'd come. So what? Is Emigration interested?"

"Oh, no, nothing like that, it seems he brought you a present though."

Dawson relaxed, "It's a custom they have on Dareen," he said with a smile, "When you visit someone you have to take them a gift, everyone on the planet does it. We nearly ran out of metal cups and knives while we were there," he laughed reminiscently, "The demand almost exceeded the supply. My last gift to him was a book of poems that I scrounged from one of Flynn's men. I don't know how Flynn went on after I left, unless he restocked from the ship that brought me home."

Hendrix nodded interestedly, "That so."

"I wonder what the old boy has brought me?"

Hendrix grinned, "Four tons of mellathium ore," he replied softly.

"What?"

Hendrix ignored Dawson's sudden leap from his chair and relaxed in his own seat puffing contentedly on his cigar while he looked up at the ceiling.

"I can foresee a big future for you, Dawson. I can see you making plenty of trips to Dareen visiting people and taking them presents, and of course you'll have to invite them back so that they can bring you presents. You'll have to take a few people from Earth with you as well and introduce them all round. But I don't suppose you'll mind that, will you?"

Dawson's mind was reeling under the shock of what Hendrix had said. The solution to their problem had been right under their noses the whole time, and in its simplicity it had escaped them. His brain took in the facts from a great distance, and the facts were submerged under the sudden knowledge that Dareen would be all right.

"You want me to go back?" he said dazedly at last.

Hendrix nodded, "Yes, you and Flynn. We'll send a couple of others with you to begin a regular visiting service. Why? Do you mind?"

Dawson straightened up smiling, "No," he replied. "No, I don't mind at all." And as he said it he thought of Saren, she would be there, waiting for him, too.

THE END



Physical violence could not possibly overthrow the balanced ecology of the twenty-first century, but there was one subversive way in which the overthrow could be accomplished—reckoning without Manager Max Larkin.

THE PROPHET

By JOHN CHRISTOPHER

Illustrated by QUINN

NEW WORLDS

The first time Max Larkin met Joseph Dwyer it was at the Prophet's own instigation; not that he was known as the Prophet at that date. Max's secretary brought the letter in with the rest. It ran simply enough, in the formal style:

"Joseph Dwyer respectfully requests audience with Manager Maxwell Larkin, at his convenience."

But there was something missing. Max examined the letter quite carefully before he realised what it was. It was the affiliation sign, invariably stamped in the top left hand corner of the notepaper to mark the writer's connection. "Atomics" . . . "Transport & Communication" . . . "Television Services" . . . In this case it should have been "United Chemicals," since it was unlikely that anyone outside the organisation would request an interview with a U.C. Manager. On this notepaper there was nothing. Max was curious. He granted the interview.

Dwyer appeared at the villa on one of those afternoons in February when southern Italy shows its teeth. Max sat indoors, smoking his special brand of Virginian mixed with the aromatic Martian lubla, and watching through plate glass the squalls of rain beating across the Bay towards Naples. A hydroplane, skimming in from Capri, was making heavy weather of it. Its nose frequently disappeared in clouds of spray. Max had been in a hydroplane. It was unlikely, he reflected, drawing on his pipe, that there was a single person on board who was not violently sea-sick.

He found Dwyer, when he was shown in, an impressive figure. He was tall and leanly built, with grey hair and beard, and humorous but very intent eyes. His handshake was firm without giving any impression of being deliberately so.

He said: "I'm glad you were able to see me, Manager Larkin."

Max waved his hand vaguely. "I don't use the title."

"I thought you might not," Dwyer said. "You don't usually grant interviews either, do you? That's why I'm glad you've let me in."

Max said gently: "Perhaps it might be best if you told me your affiliation first. Are you U.C.? If not it would be more to the point if I put you in touch with one of your own Managers."

Dwyer settled himself comfortable into his chair.

"I have no affiliation."

It sometimes, though very rarely, happened that a man was expelled from his organisation, leaving him unitless until one of the other bodies accepted him. This might be such a case. Max probed carefully:

"You were . . . ?"

"You don't understand me, Mr. Larkin," Dwyer said. "I've never had an affiliation. I was born in a village in the Ozarks; quite a remote spot. They found us when I was about ten. My folks didn't see their way to joining anything. They lost the land, of course. From that time on they just moved about, living on charity mostly. We fetched up in India; they died there. Since then I've drifted around . . . pretty well everywhere."

"And now," Max suggested, "you're tired of wandering? You'd like an affiliation?"

Dwyer said: "I'm tired of wandering all right. But I don't want an affiliation. I want to destroy the machines."

He said it with the serious, calculating air of a child saying: "When I

grow up I want to be a space navigator." There was, of course, a line laid down for this kind of simple lunacy. A call through to Psychiatry & Medicine; they would have an ambulance gyro round to pick him up within ten minutes. But for reasons of his own Max was not fond of Psychiatry & Medicine. He rang, but only for Giovanni, his butler. He ordered the Orvieto '29. Dwyer took the glass he poured him with a look of appreciation and gratitude.

"So you want to destroy the machines?" Max asked him. "All the machines?"

"Everything after the steam engine," Dwyer said.

"That makes a clean sweep," Max observed, "of space ships, atomic power, electric and gas lighting, cars, trains, ships, hydroplanes, television and electric shavers." He paused. "I rather depend on my electric shaver."

"You could grow a beard," Dwyer commented. He stroked his own, smiling.

"And hydroponics and the lignin factories and combine harvesters. The whole lot?"

"The whole lot."

"Now tell me," Max said. "Why do you come to me?"

"For help," Dwyer said simply. "I need a nucleus of helpers. From what I know of you, you are a sensible man. You could be a Director of your organisation, but you prefer to vegetate here in Castellammare. You have"—he tapped the glass with his fingernails—"a very good cellar of wine. You don't use machines any more than you can help, and when you do you try to stick to the more primitive types, such as trains."

Max said thoughtfully: "I had no idea my reactionary tendencies were so widely known." He looked at Dwyer. "Are you asking me to take part in the violent overthrow of the managerial society?"

"No," Dwyer said, "in the non-violent overthrow."

"How?"

Dwyer said softly: "There are many things wrong with the world today—we both know that. What would you say was the paramount one?"

Max looked at Dwyer, at the intent, smiling eyes, the face unusually stamped with—character.

"The absence of individuality," he said.

Dwyer nodded. "It's a world without personality. That's its essential condition; that's its strength; and that's its weakness. It gives men security, but it doesn't give them contentment. In one sense man is master of the machine, but in a subtler and more far-reaching sense the machine is master of man. Once men realise that, they will act."

Max said: "And destroy their masters? There are guards for the protection of property. And violence always stirs up counter-violence. Will you have the strength, the weapons?"

"No weapons," Dwyer said. "We shan't destroy, we shall abandon. I said a while back that I didn't want an affiliation. That's right enough, but I'm applying for one. To Agriculture. It's a very small organisation now; swamped as a food producer both by Hydroponics and by Lignin Products. Perhaps for that reason, and certainly because it works directly on the land, it hasn't been depersonalised as much as the others have. It will be our means of protest."

Max said: "Agriculture uses machines. Some very big machines."

"Yes," Dwyer agreed. "They do—now."

Max poured more wine into the empty glasses.

"Do you realise what would happen if your plan succeeded?"

Dwyer glanced at him. "In the short run? Dislocation, outbreaks of violence, local dictatorships, famine, war . . . All those. But even with all those a fuller life, and for subsequent generations a life both full and peaceful."

"The trouble with me," Max said, "is that I'm a short run philosopher. And an automatic conservative. No, Dwyer, I won't join you. I don't think you can succeed anyway, but that's not the reason. I've given up bothering about results in the plans I make. I think that even if you could succeed, you shouldn't. The machine has depersonalised man, and man's chief problem is to find some way of acquiring true human personality again. But not this way. Not the way of catastrophe. That never has been an answer."

"But," Dwyer said, "we're going to make it one. We'll meet again, Mr. Larkin."

When he had gone Max gazed out of the window for a long time. Another hydroplane plunged across the Bay, rocking even more heavily on the squally sea than the first had done. He turned back to the warmth of his room. He took out a piece of paper and began a minute:

To Director Hewison, United Chemicals
From Larkin . . .

Then he screwed the paper up into a ball, and threw it away.

During the next few years Max did not forget Joseph Dwyer. He noted carefully the occasional brief, contemptuous references to his activities on the telescreens. It was a telecommentator who first called him the Prophet; a particularly unpleasant looking man with the gift of the sanctimonious sneer that the great LeRoy had had before the Venusians shredded him to pieces on an interplanetary hook-up. Unfortunately Dwyer's growing band of disciples accepted the gibe, transforming it into a serious claim. Similar things, Max remembered, had happened before in history.

It was nearly four years later, and he was spending a week with Hewison in his Austrian castle, when the Prophet first received the serious, factual attention of the Evening News. Hewison and Max were dining together in Hewison's peculiar under-sea-green dining hall, and watching the large screen set in the far wall; a splendidly unrealistic mural of a submerged coral reef had been slid to one side to reveal it. The screen showed the routine rolling cornfields that always announced an Agriculture newflash.

Hewison said restlessly: "This will make three nights without a U.C. mention. I'll have to take it up with Von Hauser. Who the hell's interested in Agriculture?"

The level, unaccented voice of the Evening News commentator purred at them:

"This is an official flash from Agriculture. The Managing Director, Yatsuki Sen, today announces his resignation, in favour of Joseph Dwyer."

The screen displayed one of the flamboyant montage effects that were even finding their way into the factual programmes at that time. The view receded over the cornfields, the level tilted to take in a harvester from a

cockeyed angle; in a left top corner superimposition projection, Yatsuki's blandly smiling face faded in, ran side by side with a right hand top appearance of the Prophet, and faded out. The Prophet's sardonic, wary smile took over the whole screen, the fields wavering hazily behind it. The commentator's voice picked up again:

"A second flash, from Dwyer himself . . ."

"Dwyer!" Hewison muttered. "What the hell do they mean by that? He's got a title."

Hewison was always touchy about observance of the proprieties. The commentator, Max thought, had seemed a little confused himself, the note of utter certainty subdued a little in that chromium polished voice. The voice went on:

"None of the usual titles will in future be used in Agriculture. There will be no Managers and no Directors. Dwyer will be known as the Prophet. There will be no other titles."

Hewison exploded. "Well, I'm damned! That crank . . . What do you make of that, Max?"

The screen was stringing out the usual potted biography of the newly elected Director; but in Dwyer's case they obviously had very little to go by, and what they had didn't look anything like the normal brand. The Prophet at a meeting of his followers in a small, dark Victorian English hall, with the camera fighting an uneasy, losing battle with the leaping shadows; the only illumination was from paraffin lamps. And the Prophet in the fields, stretching out his arms melodramatically in a gesture of rejection towards a towering electric sower. The Prophet leading a massive chestnut percheron across the brow of a sunlit hill . . .

"What do I make of it?" Max echoed. "That Agriculture will break their contracts with Electricals and Atomics. That they will beat their electric sowers into ploughshares, their combine harvesters into pruning hooks. You can count Agriculture out from the world of advanced technology."

Hewison smiled. "That's a lot of talk. Are they going to do without television, without communications, without manufactured products. It's not likely!"

Max shrugged. "No? What odds would you have given on Dwyer being elected to run Agriculture three years ago?"

Hewison said shrewdly: "I'll lay odds he isn't still running it in a year's time. It's one thing crying for the primitive life—quite another thing living it."

"You're not worried then?" Max said.

"Worried? I wouldn't give a cuss if he kept Agriculture for ever. What's Agriculture? On the last food production quota they were twenty per cent against Lignin's thirty and Hydroponics' fifty. And Lignin and Hydroponics were both deliberately under-producing. We can cut them out tomorrow, and never feel the difference. But can they do without us?" He looked at Max triumphantly. "What about fertilisers?"

"They're going to breed more animals. Look. Can I play around with this? On my own?"

Hewison said: "Why bother?"

"I shan't want anything—except Lucas. You can spare him."

"Lucas is one of the most promising youngsters we've got. I don't want



to waste him on this kind of tomfoolery."

"You will, though," Max said, "won't you?"

Lucas was young and spare and not very tall; not unlike what Max had been like at twenty five. Max didn't fool himself into not seeing that that was one of the reasons he liked him. He said, at the end of their interview:

"You've got the idea?"

Lucas nodded. "I've got it."

Max said: "Don't you get won over yourself."

Lucas grinned. "I'm a careerist, not an idealist. You don't have to worry about me."

Most of the Directors of the organisations took the line, as Hewison had done, of tolerant contempt. If Agriculture wanted to indulge in a burst of

primitivism, that was their own damn stupidity. They reckoned on a few months of glorious enthusiasm, followed by a relapse and the drift of workers, away to other bodies that could provide the gadgets and laid-on comfort of civilised life. But as an insurance policy against the early enthusiasm leading to acts of sabotage against their own machines, the Council of Industries called on Dwyer to affirm the sanctity of managerial sovereignty. He replied in a televised address. Back in his villa, Max watched it with interest.

The Prophet said: "I shan't often get such an audience. I'm certainly going to make the best of it."

The man was a brilliant rhetorician. He could be melodramatic; in the brief shots of his early proselytizing activities Max had recognised his masterly control of emotional fervour. But now, addressing an audience that was almost completely ignorant of him, he dropped as naturally into this sane, humorous, man-to-man way of talking. His hands rested calmly in front of him on the desk; the vertical lines against the corner of his lips carried his warm common-sense through the cameras and through the vision screens.

"You will have heard some wild stories about me," the Prophet said. "It's up to you whether you believe them or not. If you have any sense you won't believe them all. But don't disbelieve them all, either, for some of them are true. The biggest is that I want to disrupt the world as we know it today. Well, that's true. That's certainly true. I want to take away from you—from all you listening—the score or more of electrical gadgets that you can see just by glancing round your room. And that includes this screen on which you see me now. I want to take from you that soft job in an office or on the production line, and put you to hard and uncomfortable work on the land. I want to put callouses on your hands, and unsiced food in your bellies. But there's more to it than that. Listen, and I'll tell you how men used to live before the machines came."

The Prophet launched into an account of life in mediaeval Europe. As a mediaevalist himself, Max enjoyed it. He painted the atmosphere in with thick strokes of colour, until you could almost see the slow, ritualistic pattern of life lived against the background of the unchanging earth, each strand, of hunt and husbandry, of labour and play, falling inevitably into place in the great tapestry. Wisely he used no illustrations to make his effects; the cameras stayed on the man's own mobile face while he built up the picture in the minds of his audience. And more wisely still, he didn't hold things back. The harshness and the cruelty of that life were given their due prominence. The man on the rack was there as well as the gilded nobleman, the vestial soldier as well as the yeoman peasant, the starving beggar as well as the laden merchant. It was the colour, the sense of life lived personally and with purpose that came over. Against that all the misery and inequality were small blots on the riotous pattern. Max could almost feel it sinking home in hundreds of thousands of drably comfortable and uneventful homes.

The Prophet smiled. "Now all that I have been saying is quite beside the point of this talk of mine. I've just been explaining why we in Agriculture have done something that might seem on the face of it to be very stupid—turned our backs on the machines. We have simply made our choice between living in comfort and living as we feel men ought to live, by the sweat of their brow and on the products of their own toil. We have made our choice, and

we are going to abide by it. I won't be appearing on this screen again. But before I say goodbye to you, I want to make a few things quite clear. We are not machine wreckers and we have no intention of starting a holy war against them. Keep your machines, if you want them. The essence of our movement is brotherhood and freedom. All are free to join us; all are free to leave us. On our farms we shall live in peace. We hope all men may do the same."

Max put through a telecall to Hewison a week later.

"On a point of interest," he said, "just how many people have you lost to Agriculture in Italy alone?"

"I haven't got the figures by me," Hewison said. "I can tell you it's over fifty thousand."

"You're not worried, though?" Max said.

Hewison laughed. "We can spare five hundred thousand without worrying. And this bunch will be back at the first back-ache. I never thought you'd turn into an old woman, Max."

"As long as you stay cheerful," Max said. "That's all I worry about."

Hewison said: "I couldn't be more cheerful. Do you know how many opted for U.C. from this year's Universities' honours graduation? Nine hundred and twelve! and Genetics got less than six hundred. Wait till I see old Tolski!"

"That's fine," Max said drily. "That's just fine."

But they did not return at the first back-ache. Not more than a handful. Thinking things over later, Max wondered how much credit should go to the inevitable satisfaction of a healthy and purposeful life, and how much to the personality and leadership of the Prophet. It was difficult to weigh them up, but he thought the latter was not the least considerable. Anyway, very few drifted back to United Chemicals or Atomics or Genetics Division or Lignin Industries or Transport & Communication or to any other of the great managerial bodies they had originally left. Instead the flood of desertions which had sprang up in the wake of the Prophet's solitary telecast and then died down again to a trickle, began once more to broaden. The television programmes continued to poke fun at the back-to-the-land primitivists, but their fun took on a hysterical edge. In the second spring of the Prophet's reign Max noticed certain small faults and uncertainties in the hitherto smooth flow of the civilised machine. There were occasional breakdowns in the television transmissions . . . the whole of the Naples area had an electricity black-out lasting three hours . . . an inexplicable coffee shortage developed. As spring turned to summer and the summer lengthened, the current of minor irritations increased. Late in August he went north again, at Hewison's request.

Everywhere except in southern Europe trains had long disappeared from the face of the managerial world; Transport & Communications maintained a special network through Spain, southern France, Austria, Italy and the Balkans, as a relic of the past; for the use of tourists. While gryos and turbojets and rockets climbed high, the quaint, despised railways crawled below, hugging the ground. They had been empty enough in Max's youth; recently they had been well-nigh deserted. Max was surprised to find his train for

Vienna more than three-quarters full; there were four other people in his own compartment.

One of them had a copy of the small magazine-newspaper, specially printed for the tourist rail passengers who would be cut off for a couple of days from television, and so from news of the bustling outside world. Max's eye caught the headline:

TWO MORE STRATOJETS CRASH

The man holding the paper caught his glance and nodded a powerful affirmation.

"Hell," he said. "You're not safe away from the ground any more. That's six or seven in the last couple of weeks. I'm using this doodad while my own gyro's knocked up. I'm not sticking my neck out any further than I have to."

"Any particular reason for the crashes?" Max asked.

"Any particular reason! Bad servicing, that's the reason. Take my job now. I'm in Lignin. I check the paper rolls from the mill. I used to handle one belt; plenty of time to walk round carefully and examine it for flaws. Now I've got three to handle—and the stuff's full of holes. That's O.K. as far as our job's concerned; nobody's going to blow off because of poor quality paper. But when a stratojet mech. has three jobs to handle instead of one, that's a reverse orbit. I'll stick to this form of transport."

The train began its slow climb up the peninsular backbone of Italy. They were an hour late out of Rome and Max retired to his sleeper a little later. He woke up to find the clear light of dawn falling through the glass panel above his head; and he realised the train had come to a halt. Bologna, perhaps, or Udine. But it was very quiet. He raised himself to look out of the window, and saw that the train was not standing at a station. Only wide fields stretched emptily away from the track.

He got up, washed, and dressed. A uniformed conductor came down the corridor. Max asked:

"What is it?"

"Nothing at all, sir. Slight hitch. The line's out of condition a couple of kilometres ahead. There's a repair gang working on it now. We'll be off in an hour."

When he had passed on, Max gazed thoughtfully out of the corridor window. The ground fell away from the track, and he noticed a small group working in the adjoining field. On an impulse he jumped down from the train and slithered down the slope to join them. There were three men reaping with hand scythes, and two women binding the sheaves of wheat behind them. They halted their activity as he came up to them.

Max said: "You start work early."

The eldest of the men replied: "Sun's up, brother. Sun's been up an hour. And there's a harvest to get in."

Max said: "A combine harvester would clear this field in a couple of hours."

The man smiled: "So it would, brother. There's not the slightest doubt of that."

"Well?"

"I used to work in Atomics. Five hours a day, watching needles on a lot of dials. And the rest of the day trying to find something to pass the time."

Now I don't have the time to get bored. Come in with us, brother. We need extra hands."

Max said: "Thanks a lot. Not at my age, though." He fished in one pocket. "Like some chocolate?"

He thought the women looked at the packet hungrily. The man said: "No . . . We don't grow it. We don't eat what we don't grow. The Prophet's laid it down."

Max said: "Well, in that case . . ."

From the train he watched them, back at work again, bent in their slow and painful toil.

Hewison was worried now all right. He didn't even take Max round to show him the latest addition to his fantastic castle; a new Ming ornament or a probably fake Italian primitive. He took him instead directly to his study.

"Well," he said, "what results?"

Max looked at him mildly. "Results?"

"Don't stall, Max. O.K., you were right. It was serious, damned serious. But don't stall now."

"Tell me how serious."

Hewison briefly covered his podgy face with his hands; a usual gesture of his when worried.

He said: "Things are slowing down. He's draining men away from us at a hell of a rate. I thought we'd got over the worst a few months back, but the drain's picked up again in the summer."

Max nodded. "Reasonable enough." He paused. "And then, you all have to cover for Atomics, haven't you?"

Hewison's eyes popped. "How did you know that?"

"Clear enough. If U.C.'s under-staffed a few hundred may get poisoned; if Transport & Communication's under-staffed a score of stratojets may come down fast; if Atomics' is under-staffed . . . things blow up in more senses than one. And for sheer boredom a job in Atomics would take the prize in any contest. Boredom and occupational neurosis."

Hewison said worriedly: "There have been one or two close shaves already. One at the Albany plant. The whole of eastern North America might have gone up."

He got up from his chair and walked abstractedly about the room. From the large and completely functionless Adam mantelshelf he took down a Venusian figurine in its square, water-filled glass case and shook it. The floating weed flared out by the motion into what Max privately thought still looked like a piece of floating weed. He had always felt that human critics read their own complexities into these tacked together pieces of seaweed; having spent more than fifteen years with the Venusians, Max had a high appreciation of their peculiar, water-logged sense of humour.

Hewison said: "It's not only the shortage of personnel; it's the unsettling effect on those that remain. I don't like admitting it, but generally the best go. And those that stay behind are unsettled; they're ten times less reliable than they would be normally."

He flicked the water-pet into further, flurrying motion. Max regarded it with distaste.

"Put that Picasso down. I don't like it."

"That what?"

Max gestured towards the object in Hewison's hand. One could not expect anyone with so catholic and avid an artistic taste as Hewison had to have a knowledge of the remoter by-ways of twentieth century art. At least Hewison put it down. He came over and stood beside Max.

"We'll do as you say, Max."

Max smiled faintly. "Serious enough for that?"

Hewison shrugged in a gesture of loss.

"O.K.," Max said. "Bring Dwyer in."

Hewison's eyes, deep set on either side of his small, snouty nose, considered Max carefully.

He said: "I know you don't do things without reason. So we'll pull Dwyer in if you say so. But if we do it and it's wrong . . . We're riding the Leonids, Max. What can we get him on?"

"No trouble about that. World Association Code, article 5, section 3, first paragraph. Conspiracy to monopolise."

Hewison said: "Hell, no court would convict him on that!"

"We shan't need a court."

"And we can't hold him long." Hewison looked at Max delicately. "It certainly wouldn't be any good liquidating him. He's the kind that's even more dangerous dead."

Max nodded. "I know that."

Hewison asked: "Well?"

"Bring him in."

The Prophet said: "I thought we'd meet again, Manager Larkin." He saw Max's slight grimace. "I'm sorry. Mr. Larkin."

Max said: "The circumstances aren't exactly what I would wish for it."

The Prophet smiled. "I have no complaints. 'Conspiracy to monopolise.' I don't think I'm in any danger of being convicted on that charge."

"No," Max said. "I don't suppose you are. As a matter of fact, it seemed the only way of ensuring a little chat with you, on our ground."

The Prophet looked about him, at the baroque magnificence of Hewison's study where they sat alone.

"It's not what I'm used to," he admitted.

Max said: "I won't waste time. You know something of the effect your anti-machine revolt has been having on the world. You know of the millions who have left their own organisations, all over the planet, to work in Agriculture. You may have guessed, or been told, that there are signs of dis-ruction already in the world's technological fabric. That is all true. But there is more than that. Increasingly the Atomics staffs, at their plants, are understaffed, or badly staffed. The situation is extremely dangerous. If one of those plants goes up it can take half a continent with it."

The Prophet said: "If that happened, it would be tragic. But I don't see that there is any way in which I can prevent it. We in Agriculture simply live our lives as we think best. We make no attempt to influence others."

Max said: "I'm going to put to you a question which is much the same as one I put to you six years ago. Are you determined to stick to your way of life, even if it means plunging the whole world into chaos and destruction?"

The Prophet said gently: "The answer is still the same. Shall I put one back to you? Are you not willing to close down the atomic plants in time to prevent these explosions you are afraid of?"

Max said: "When principles are opposed and inflexible, only one argument remains."

"Force? I've always been prepared for that. Agriculture doesn't depend on me any longer. The movement can do without me; it might even do better with my memory. You could torture me, but I would recant. There would be little point in your pressing me in to a forced telecast—my people don't have television sets. I'm afraid force won't serve you."

"No," Max said. "Not force. Treachery."

"I don't see . . ." the Prophet said.

"But thanks to the wonders of technology you are enabled to." Max looked at his watch. "Would you like to see what is happening at Esmont?"

The Prophet's eyes flicked towards the screen set in the study wall, and then away again. He said flatly:

"There are no television transmitters at Esmont."

"I spoke of treachery," Max said.

He walked across to the closed line panel, and pressed the appropriate keys. Lights in the room dimmed as the screen lit up into life. Esmont, in Virginia, was the centre, as far as a centre existed, of the Prophet's movement. There had been constructed the huge amphitheatre, built on Greek lines to make speech possible to a vast audience without mechanical amplification. Lucas had rigged the fixed transmitter up well. The screen covered the spot where the speaker would stand, and also showed a good section of the amphitheatre beyond him. It was packed with people. As they watched, a slim, not very tall figure moved into view.

The Prophet said: "Leopold!"

Max said: "Yes. Your deputy. But his real name's Lucas, not Barnett."

The crowd greeted him with an enthusiasm that had a sullen undertone to it. Max glanced sideways at the Prophet. His face was still, but his hands were kneading together. He turned to watch Lucas. The screen showed his back and right side. He began to speak, gesturing a little with his hands.

It was a good, demagogic speech. The Prophet had been arrested. They all knew that. The reactionary bosses of the machine world had struck against their beloved leader because that was the only way in which they could defend their crumbling empires. They thought that Agriculture was powerless to defend the Prophet. For a long time Lucas rambled about the subject, weaving a web of injury and loss, leading up to the prepared finale.

"But are we helpless?" Lucas demanded. "Are we helpless? We are not. They miscalculated in that." From a pocket of his overall he drew a small metal object, with a vague resemblance in shape to the small size Klaberg pistols. "We have been preparing. This is a new weapon, which we have developed in secret. All over the world we have arsenals. Watch!"

Well away from the crowd there was a prominent spur of rock. Lucas raised the weapon. There was a flash, and the rock exploded into shattered fragments. A low roar came from the massed ranks, swelling up into triumph.

"To-morrow!" Lucas shouted. "To-morrow we march . . ."

Max switched the screen off. The lights glowed back to brilliance. He looked at the Prophet. He was sitting, gazing without apparent emotion at the empty screen.

Max said: "Well?"

"Yes," the Prophet said. "You knew them better than I did." There was bitterness now in his voice. "Violence against the fear of violence. A machine against the machines. I didn't even suspect the stool pigeon you placed on me."

Max said: "Don't blame Lucas too much. He was doing his job."

"Yes," the Prophet said. "A job . . ." He turned to Max. "And mine's over. What's to prevent me leaving things at that?"

"Only conscience. You've seen your ideal crash. You won't refuse to save the world from chaos out of personal spite."

The Prophet stood up.

"All right," he said. "Tell me what you want."

With Hewison again, Max watched the Prophet's last address to his people. For the safety of the world, he told them, they must relax their stringencies against the use of machines. The whole world, after all, was an interdependent organism; all men, everywhere, were units in it. Atomics were critically under-staffed. He hoped that volunteers—men who had worked in Atomics before—would go back now . . .

Hewison shook his head. "I still don't see why you guessed he would act this way."

Max said: "There was talk now and then about destroying the faith of the masses in the Prophet. It always seemed stupid to me because to the mass the leader is something more than human; attacks on him only go to strengthen allegiance. But the converse was interesting. Destroy the leader's faith in his followers, and you've really got something. The Prophet's success was a measure of his belief in certain qualities in his people. When that belief crumbled, everything went."

"But to tell them to go back . . .!"

"You will never," Max told Hewison, "never understand the way an idealist's mind works."

The Bay of Naples was serener when Max said goodbye to Joseph Dwyer.

Dwyer said: "One small point. That impressive demonstration of the secret weapon?"

"Simple enough. A small explosive charge placed beforehand. Radio-activated. The secret weapon was a small transmitter."

Dwyer nodded. "I'm afraid I've failed to see the obvious in many ways."

"And now?" Max asked.

"I've got a passage to Venus. Long Province." Dwyer smiled wryly. "Pity the natives!"

"Good luck."

From the villa Max watched him trudge downhill; the man who had believed in human goodness; who had been willing to let the world slip into anarchy and barbarism because of that belief. Pity, yes. But, he reflected, it wasn't the Venusians he pitied.

THE END

A short article on gene mutation and the effects of radiation upon living organisms.

ALL CHANGE

By LAURENCE SANDFIELD

Quite often while reading science-fiction one comes across a story dealing with mutation as a main or subsidiary theme. While the seasoned follower has at least some idea of the cause of this, the newcomer may quite likely be puzzled by the whole business.

What is mutation? and why? Plus the major question, how?

The mutation is generally portrayed as an alteration, structural or mental, to an organism. This is quite correct. Why? Because the organism has been interfered with by radiation—favourite since Hiroshima—or because of evolutionary processes. Both of these are true, as the slow process of evolution would probably not exist without mutation, and because “hard” radiations like radioactivity are liable to interfere (putting it mildly) with the genes that are the controlling factors of heredity.

Let us consider this business of evolution. Since the natural scientists accepted the fact that evolution has been and is taking place, there have been two main theories extant. These are called the Darwinian and the Mendellian. There is another, called Lysenkoism, which had a lot to commend it until the Soviet Government began to use it as a sort of “herrenvolk” theory, similar to the infamous Aryanism of Adolf Hitler.

Darwin’s idea, which Lysenko used largely as a basis for his own theoretical structure, was briefly something like this:

A certain organism—bird or beast, whichever you will—produced young similar to itself. With the acquisition of new and different environments and habits came changes in the form of its descendants. These slowly acquired changes were communicated through a whole line of descent, and ages of change brought about the finished creature.

This reasoning puts the chicken first.

The Mendellian theorists take the opposite view. (Incidentally, they are called Mendellians because the Austrian monk and flower breeder Gregory Mendel was the pioneer.) They make no attempt to say when the first egg appeared any more than the Darwinians give a temporal location for their first creature. Why should they? Let the geologists find that, until we have time travel.

First, then, say the geneticists, we have an egg or ovum producing a characteristic creature. Over a long period, mutations caused by varying factors resulted in changed genes, producing creatures different from their ancestors. With further mutation and plenty of time, we find the creature assuming the form we know to-day, if it managed to last long enough.

Although a finished form, there is always a certain degree of plasticity in the evolutionary sense.

We shall define evolution as the process by which Nature brings animals including man to the greatest degree of perfection possible.

Assuming that everyone has a nodding acquaintance with the facts of life, let us look at these genes we've been talking about. When male sperms or female ova are examined under a microscope they are found to contain curved, rod like structures. When the cells are stained with an aniline dye, these rods stand out like pillar-boxes. Hence the name, chromosome, "colour-bodies." The chromosomes are made up of genes in chains like strings of beads, with all the beads pushed tightly against each other, causing a rod-like appearance. They can be stretched out like chains, and regular chain gangs they are, too. Plumbers, engineers, builders—it would be hard indeed to find a trade unrepresented. Think of the staggering complexity of your own body structure, and you'll see why.

Roughly, the genes can be considered under three headings:

1. **DOMINANT.** This takes only one gene to produce a given effect. Example: one gene for brown eyes will produce this even if one parent is blue-eyed.
2. **RECESSIVE.** Takes two to produce a given effect. Example: two genes for blue eyes, one from each parent, will produce blue-eyed offspring, as there is never a brown gene present in a mating of this type.
3. **SEX-LINKED.** The sex-linked genes can only communicate their characteristic to the same sex, although the opposite sex can and usually do carry the gene. These genes are nearly always recessive.

Just for the record, geneticists signify dominant and recessive genes by the capital and small forms of their initial letters, thus blue eyes being dominant over brown, B=brown, and b=blue. A blue-eyed mating is therefore written bb, a brown plus blue Bb.

A word more anent chromosomes. Every human receives 48 of these, 24 from each parent. Although the genes are numbered in hundreds, they are held in 48 chromosomes. No more, no less. Ever.

There are two types, the "X" and the "Y." These are classification types. All female ova contain X chromosomes only. A large number of male sperms do also. In addition, however, any given number of sperms are likely to show a slight preponderance of Y chromosomes. The Y type is the sex determiner. Incidentally, they are shorter than the X, having far fewer genes. When the ova and sperm fuse in fertilisation, a fusion of two X's results in a female child. Should there be an X-Y fusion, the child is always a male.

The fact that the XX combination carries more genes is probably the reason for the greater hardiness and longer life span of human females.

These then are the factors that govern the heredity of all multicellular animals.

Before looking at mutation in particular, let's see how man has, by selecting certain types of mutation and helping them to breed true, moulded animals to his own design.

The classic example is the milch cow. In the wild an athletic beast, she

has been bred for meat and milk for so many generations that overdeveloped muscles and mammillae effectively prevent her from outrunning any enemy. Without man's protection, the cow would soon be extinct.

The type of gold fish variety known as the veiltail is an extreme example. Its globular body and out-of-place internal organs render it a biological monstrosity, although the fine upstanding dorsal fin and long flowing tail that trails behind it like a wedding veil make it a thing of great artistic beauty. Watch, however, its waddling, gasping passage through the water and compare it with the wonderful grace of its more normally shaped brethren.

So much, then, for man's interference with Nature by intent. What may other things bring about?

Mutation is the result of changes in the genes. Change can be brought about mainly in two ways. The first is a subtle and possibly chemical change in the body of the gene, or secondly the injury or destruction of one or more genes.

It is a rather unpleasant fact that most mutations are harmful, to the individual or to the race. They are, of course, harmful or not according to their reaction to the creature's environment. They may be entirely and negatively harmless.

For instance, a mutation that produced an ornamental comb on top of the human head would be of doubtful utility but certainly not anti-survival. Six fingers would be a positive help. On the other hand the stiffening of the fingers into claws would rob mankind of the very thing that has taken him to his present level—the ability to make and use tools.

Indeed, the genus *homo* is extremely apt to mutate—biologically a good sign. Something like one in one thousand births show evidence of structural deviation from the norm. Some small percentage of them are so thoroughly different that if they are born breathing, their differences allow them to live for very few hours.

Of course, the alteration or injury to the genes does not affect the individual but is made manifest only through his or her offspring.

Look for the moment at successful prosurvival mutations that have bred true. The zebra's vertical stripes that enable it to conceal itself among the tall grasses of its environment. The similar feature of the Amazonian angel fish that performs an almost identical function. And the three-pound brain of man, which looks like recoiling upon him.

Regard for a moment the violence of chain reaction—the rush of lethal particles ripping unselectively through the very tissues that make Mankind what he is—destroying with insensate impartiality. The genes become broken, crippled craftsmen, struggling vainly to build as they should.

Enforced mutation.

It is like a bricklayer in hell building a wall, but someone has cut off his hands. With the stumps he struggles to build, with tools that no longer obey him now that his own vital built-in tools are gone. So, the genes. Distorted, all but destroyed, they still stubbornly try to build within the sleeping embryo. There is little hope that radiation mutation will bring improvement to humanity. That lies only in the old way, the gradual change, the long upward climb that has given us the ability to think.

THE END

It was the oldest of old problems yet newer than to-morrow's rocketships—where should a space pilot's duty lie, to his wife—or to his ship?

ROCKETS AREN'T HUMAN

By E. C. TUBB

Illustrated by QUINN

She wasn't at the spaceport.

Jim Newton stood at the open port of the rocket ship, two hundred feet above the ground, and felt the warmth of the sun as it struck against his pale features. Narrowing his eyes against the glare he stared at the crowds gathered around the gate in the high wire fence surrounding the landing field. Women were there, and men, and a horde of shrill voiced children. Couples stood arm in arm, and parties moved towards the waiting buses; it seemed as if all the city had come out to watch the landing.

But not his wife.

Bitterly he swallowed the sickness of unrealised anticipation, and fumbled with his foot for the treads of the permanent ladderway. The smooth hull of the rocket swept upwards before his eyes as he descended, and he could feel the warmth of the sun penetrating his uniform jacket. The treads altered position, and as he climbed down the side of the great fin he could see the gaping orifices of the pitted venturis at the base of the ship.

His feet touched dirt.

A man called to him as he began to walk away from the fin, and looking up he saw the agile figure of Seldon, his second pilot. Impatiently he waited for the man to join him.

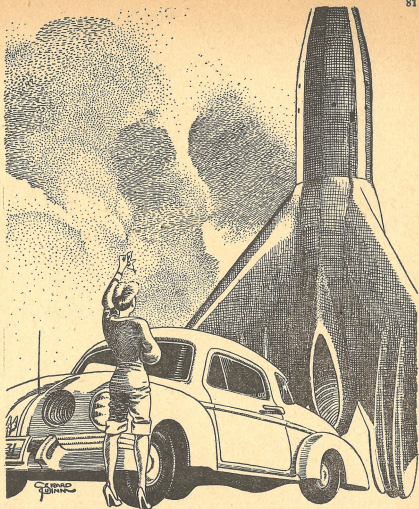
Seldon jumped the last few treads, stumbled a little and laughed.

"Lord, but I feel heavy. It wouldn't be a joke if I came fifty million miles just to break a leg on the last few feet."

"Take it easy for a while," advised Jim absently. He searched the waiting crowd with anxious eyes. "Got anyone waiting for you?"

"Me?" Seldon shook his head. "Not unless that little redhead I met last time home remembered me." He chuckled reminiscently. "What a girl that was."

Together they walked over the scorched dirt of the landing field, heading for the low huts huddled against the fence. Seldon glanced casually at the crowd.



"Which is your wife, Jim? I don't believe that I've met her yet."

"She isn't here."

"No?" Seldon grinned. "Seems as if everyone else is, though."

"She may be ill," said Jim defensively.

"She may be," agreed Seldon.

"Perhaps the car broke down, she may have had an accident."

"I hope not," said Seldon. He grinned at Newton. "Stop worrying about it, you don't have to convince me why she couldn't come."

"She hasn't missed a landing before," Jim insisted. "She's always been just outside the gate waiting for me."

"Maybe she forgot the date, after all you've been away for over three months."

"Impossible!"

"Of course," said Seldon reassuringly. "I expect that you'll find her at home nursing a cold or something."

"Madge wouldn't forget the date, and it wouldn't matter how long I was away. She isn't like some women, I can trust her."

"Trust her?" Seldon looked curiously at Newton. "What's that got to do with it?"

"Nothing," said Jim. "Nothing at all."

Together they entered the hut.

The formalities were few and soon over with. Jim received his belongings; his keys, his wrist watch and money, some personal papers necessary on Earth, but unwanted weight in space. Seldon waved a cheery goodbye and headed for the nearest visiphone thumbing a little book of phone numbers.

Slowly Jim walked towards the gate.

As always, he felt the beginnings of an inferiority complex. It was as if he had suddenly been reduced in size; with the rest of the crewmen he felt normal, but it was a normality not of Earth. Defiantly he squared his shoulders and tried to make the most of his five feet three inches. It didn't help.

The gatekeeper smiled at him as he swung open the stout wire mesh gate.

"Have a good trip, Captain?"

"The usual, George. Do one and you've done 'em all." He grinned at the man, grateful for his small size; for a while, at least, Jim could still feel normal.

"Seen anything of my wife?"

"Your wife, sir?" The gatekeeper frowned, then smiled as he remembered. "The blonde lady. No. No sir, I haven't." He looked sharply at the Captain. "She may have been delayed, sir, or perhaps she's at home not feeling too well."

"Yes," said Jim. "I suppose that's it." He moved slowly out of the gate.

"Goodbye, George."

"Goodbye, sir. See you in three days."

"Yes, three days." Impatiently he thrust his way through the crowd.

There was no answer from the visiphone.

He stood in the little booth hearing the clicking of relays and stared at the screen, hating its impassive blankness. A voice murmured in his ear.

"Mrs. Newton is not at home, may I take a message? Mrs. Newton is not at home, may I take a message?"

"Where is she?" blurted Jim, then realising the stupidity of questioning an automatic recorder, slammed the handset back onto its stand.

It took him a long while to find a vacant heliocab.

Impatiently he sat hunched in the cramped cabin, ignoring the countryside flowing beneath him. He missed the long intimate drive home from the spaceport, Madge driving with her expert touch, and the warm intimate exchange of pleasantries destroying the cold vacancy of their long parting.

They would have used the open car this time of year, and the wind would have caught her hair, blowing it back in a shimmering cloud of golden beauty from the small piquancy of her face. She would have chatted excitedly about all the things she had done while he had been away; small gossip of

which he could have no real part, but which was an integral part of her. Sitting hunched beneath the spinning blades of the heliocab, Jim realised again just how much he loved her, and just how much he had grown to depend on his faith.

With a slight jolt they landed.

With hands that trembled despite his will to steady them, he paid the pilot, and with a mounting sense of urgency ran from the landing strip towards his home. For the first time he felt grateful that his duplex bungalow was near the public landing strip. He was gasping for breath by the time he reached the drive; spaceflight didn't develop a good physique, but he forced himself to continue running to the very door.

The house was empty.

He had half expected it, yet it still came as a shock. Roving worriedly through the empty rooms, he knew that he hadn't really believed that she would not be there. Despite the visiphone call, he had hoped that she would have been home when he arrived. He felt worry gnawing at his stomach and desperately tried to rationalise what was after all a common enough situation.

His wife wasn't at home.

It happened all the time. Women went out shopping, visiting, sight-seeing. Women missed trains, buses, ships. But few women would miss the arrival of a spaceship, and what woman would miss meeting her husband after a three month absence?

He didn't like to think about it.

He paused in their bedroom, idly fingering the silk of the coverlet and smiling at his own photograph resting on the bedside table. There was a casual air about the room, a subtle intangible that was wholly Madge. A faint scattering of face powder on the dressing table, a hint of perfume lingering in the air, a scrap of lace-edged nylon protruding from an open drawer.

Smiling he opened the drawer to its full extent, letting the sheer nylon of the garment ripple through his fingers. As he folded the thin material his hand struck something hard and square. Curiously he uncovered it; and felt ice begin to close around his heart.

He stared down at a thin packets of letters.

He stood before the open drawer for a long moment, looking down at the square envelopes, trying not to harbour the ugly thoughts that welled unbidden to his brain. Madge was innocent, the letters were probably from a girl friend or from someone equally as harmless, yet . . .

Where was she?

If the letters were innocent there would be no harm in reading them, and yet if they were innocent, and they must be, why read them at all? He trusted his wife, to read her letters would be admitting that he doubted her, and yet, why not?

He hesitated for a long while, hoping for an interruption, hoping that Madge would enter the room and laugh him out of all his stupid doubts. The envelopes stared up at him, their white faces marred with the thick lines of a masculine scrawl.

He read the letters.

Jim sat before the full-length windows facing the street, the letters open

on his lap, and soft music welling from the console teleradio. The setting sun threw long shadows over the lawn, sending the distorted shape of the house almost to the very street. He had passed through the gamut of emotions. He no longer felt the desire to kill, the urge to rend and destroy, the desire to get stinking drunk. He just felt numb, the way a man feels when he has just lost all he has value in. The music swirled about him soft, cloying, but to him just a noise, a sound to stop his ears straining at the passing of each car.

He was waiting for his wife.

She came at last, came when the sun had slipped beneath the horizon and the dark edges of night pressed against the dying day. She came in a sleek convertible driven by a tall blonde man dressed in clothes designed to show his superb build to the best advantage. Jim was glad that he didn't come in, glad that he just waved a casual farewell from the driving seat of the car. He was grateful that they didn't kiss, he doubted his own restraint.

He didn't move at the sound of her key in the door. He didn't move when she crossed the hall with quick small steps, and stood as if listening to the music from the console. He just sat and looked at her as she entered the room, heard the quick intake of her breath as she recognised him, and tried not to remember how much he loved her.

"Jim! What are you doing here?"

"I live here," he said heavily. "Forgotten?"

"Of course not," she laughed, and crossed the room towards him with her small quick steps. "I didn't expect you so soon. I thought that the ship didn't arrive until tomorrow."

"Why should you think that?" he asked bitterly. "Spaceships are always on time, and you've never forgotten before." He looked coldly at her. "Perhaps you've been too busy to remember."

"Jim! What's wrong?" Laughing she bent to kiss him, and he heard the sharp hiss of her indrawn breath as she saw the open letters.

"So you know."

"Yes," he said. "I know." Anger surged through him and with a sudden movement he rose to his feet. The sound of the slap echoed startlingly loud against the soft surge of the music.

"You cheap little two-timing bitch! Was three months too long to wait?" He stood glowering at her, trying not to feel ashamed and trying not to yield to an impulse to beg her forgiveness.

"I deserved that, Jim," she said quietly. The mark of the blow stood out against the soft whiteness of her cheek.

"I'm sorry." He sank tiredly into the chair. "I shouldn't have struck you, but, Madge—why did you do it?"

Silently she came and knelt at his feet.

"I'd looked forward to seeing you so much," he said dully. "You can't even begin to know how much. It was all I had to think of when in space, you, and the things we would do together." Angrily he crumbled the scattered letters.

"Did he mean so much?"

"No, Jim. He didn't mean anything at all." She felt for his hands, held them against his instinctive recoil.

"I'm not excusing what I did, but I'd like you to know that it wasn't

because I don't love you." She stared out of the windows, the last fitful light of the day making a small round blotch of her features. The headlights of a passing car lit the room for a brief moment, and Jim could see the tears coursing down her cheeks.

"I was so lonely, Jim. You can never know how lonely. You were away too long, you are always away too long. I met him at a party, you know, one of those things where everyone drinks a little too much, dances too much, and talks a lot of nonsense. The sky was covered with stars, and there was a gentle breeze. There seemed to be magic in the air that night, it seemed to bring you so very close, and he was there, and, and . . ."

"But that wasn't the only time."

"No." She wiped her eyes with a quick motion of her hand. "But it was the first time. I was a fool to keep his letters, but it's all over now, Jim. It has been all over for weeks."

"Was he the blonde who drove you home?"

"Carl? No, Jim. Carl is just a friend."

"I see."

"What are you going to do, Jim?"

"Do?" He sighed wearily. "I don't know. Divorce you perhaps, is that what you want?"

"If you want me to go, Jim, I won't argue. I deserve it I suppose."

Slowly she climbed to her feet, and walked heavily across the room. Jim watched her, watched the smooth perfection of her small trim shape, and felt his anger die within him.

He thought of the long aching months of separation, of the warm intimacy of their previous relationship, and of what he was losing. He thought of a time on Mars shortly after their marriage, of a girl he had met there, and of the burning self-disgust he had felt afterwards.

"Madge!" he called. "Madge!"

"Jim!"

She ran to him with her quick short steps, and he could feel the wetness of her tears against his cheek.

The soft music from the console swirled around them.

Seldon visiphoned next morning. He called from a public booth and grinned at them over the shielding handset.

"Hello, am I intruding?"

"Hello, Seldon," said Jim. "What can I do for you?"

"Nothing," said the second pilot cheerfully. "This time I'm going to do something for you. I've got spare tickets for the rocket races, coming?"

Jim hesitated, glancing at Madge who stood just beyond the scanning range of the visiphone. She nodded.

"Right. Where and when?"

"Ten, and I'll catch a heliocab to your house, we can use your car to finish the journey." He hesitated. "Everything all right?"

"How do you mean?"

"Your wife, was she well?"

"Yes, just a stomach upset. See you at ten." Jim broke the connection.

Seldon arrived with a petite brunette and a subtle aroma of alcohol. He yelled cheerful greetings, introduced the brunette as Poppet, and bundled

them all into Jim's big sedan. The tickets were for the grandstand, the gold enclosure, and the view was perfect.

They bet a little, winning and losing about even, and watched the screaming rocket-driven torpedoes whining around the track. Seldon continued his drinking bout, whispering to the brunette, and laughing insanely as liquor spilled down his chin. Jim tried to relax watching the suicidal speed of the racing torpedoes.

"How would you like to be a racing driver?" Seldon gestured with his glass towards the track.

"I wouldn't," Jim said decisively. "They must get a full ten gravs at the turns, and the acceleration shock must be something out of this world."

"But you are accustomed to high grav acceleration aren't you?" asked the brunette.

"Not like that. I bet that there isn't one of those racing drivers who doesn't get punch drunk after a short while."

"Maybe they do," said Seldon. "But think of it while they last. Fame, big money, home every night. What do we do?" He pulled a face at his glass. "We lift a can into space, set it down on Mars and take three to eight weeks to do it. We lift up off Mars and head for Earth. Earth to Mars, Mars to Earth. Sometimes I get sick of it."

Jim laughed and winked at the brunette.

"What you need is to get married, Seldon. How about it?"

"Married! Me?" Seldon drained his glass and shook his head. "Not me. I should allot my wages to some fat female to spend for me. What would she do while I was away?" He leered. "Don't tell me, I can guess. No thanks, when I get married I want to enjoy my wife for more than twelve days a year, which is all the home leave we get."

"So you don't approve of spacemen getting married?" Madge asked.

"Present company excepted, no. What sort of a life is it for a woman married to a spaceman? He gets three days leave everytime he sets down on Earth, which is about four times a year. I know lots of females who'd like to tie up with me, but not with any idea of doing anything else but spend my money for me. I can do that myself, and no insult intended, I can always find someone to help me spend it."

"But what if you fell in love with a girl?"

"Then I'd resign. Marriage is the one thing worth doing well if at all, and no spaceman can make a good husband."

Madge smiled and both she and Poppet excused themselves to head for the powder room.

"I'm glad that you feel like that about marriage," Jim said quietly.

"Sorry if I've offended," apologised Seldon. "Sometimes my big mouth runs away with me."

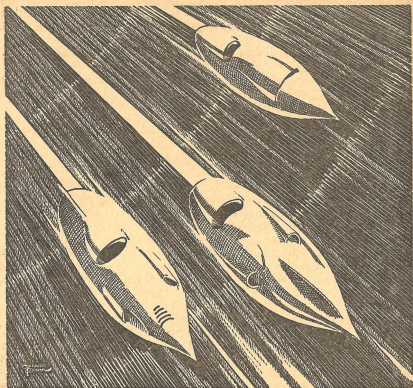
"No, I'm not offended. You've helped me to make up my mind."

"And that is?"

"I'm going to resign."

"What!" Seldon sat upright in his chair staring at Jim. "You must be joking."

"No. I'm not joking," he stared curiously at the second pilot. "Why are you surprised? Isn't that just what you've been advocating?"



"Generally, yes. For you, no." Seldon put down his glass with an expression of distaste, he seemed to have suddenly sobered to an amazing degree.

"You are a rocket pilot, the captain of a spaceship. You can't resign. It took ten years to train you, and another five before you could take full command. Fifteen years gone out of your life, you can't just throw that away."

"I can start again," Jim said defensively. "There are other jobs."

"Maybe there are, but where can you find them? As a spaceship captain you get a pretty good salary. What can you do to earn as much on Earth?"

"Money isn't everything. There are more important things—love, a home, children, a wife."

"A faithful wife?"

"What makes you say that?" Jim flushed with sudden anger. "What

are you driving at?"

"Nothing." Seldon refilled his empty glass. "Forget it, but do me one small favour."

"Yes?"

"Don't resign just yet. Do one more trip first, it's only another three months, and see how you feel then."

"No."

"Then wait until just before blast-off time. Your relief can take over."

Jim looked curiously at his second pilot.

"You think that I'm a fool, don't you?"

"If you resign, yes."

Seldon reached for the bottle as the women returned.

They went to a party that evening, a gay trivial affair held on the beach of the local lake. Seldon had excused himself and had gone off arguing angrily with his brunette. It was dark and tiny lanterns sparkled amid the trees contrasting with the roving spotlights gliding over the water.

They sat at one of the small tables, Madge drinking fruit juice spiked with gin, and Jim just drinking fruit juice. An orchestra played from a hidden bandstand, and couples glided in smooth rhythm over the cropped lawn. A man halted beside their table.

"Hello, Madge. Dance?"

It was the well built blonde who had driven her home. She smiled at him, then glanced at Jim.

"No thanks, Carl. Have you met my husband?"

"Now I have." Carl gave an easy grin. "I've heard all about you, Jim. Spaceship captain aren't you?"

"Yes." He turned to his wife. "Dance if you want to, Madge. I'll watch."

"No, Jim. No really." She smiled apologetically at Carl. "I haven't my high heels and I'd be far too short for you to dance with."

Carl laughed and sat down at their table.

"Don't bother to apologise, my feet are killing me." He snapped his fingers at a hovering waiter. "Three gin exotics."

"Not for me," said Jim. "I'll just take the exotic and leave out the gin."

"No?" Carl shrugged. "My mistake, I always had the idea that you spacemen were regular hell burners when on leave."

"Some are," agreed Jim. "But I've never acquired a tolerance for alcohol, and I haven't time to get over a hangover."

Carl sipped at the tall frosted glass the waiter had set before him.

"What do you think of Banner's chances in the elections? I heard a rumour from someone who should know, that there are graft charges coming up which will blast him from politics, local and otherwise, for good."

"I heard that too," said Madge. "Something to do with the public landing strips wasn't it?"

Jim sat and listened to the ebb and flow of casual chatter. He wasn't interested, he couldn't even understand what they were talking about. New words had crept into common usage, transient slang, terms coined by the teleradio entertainers, used for a while, then dropped for others.

For the first time he realised just how much he was out of touch.

Twelve days a year on Earth, and the rest isolated as few men had ever

been isolated before. No radio, no newspapers, no magazines, casual gossip, movies, shows, lectures, mail, not even advertisements.

Nothing.

For weeks they hung in free fall, without even a book to read. Books had mass, and mass took fuel to lift. A pack of cards, a set of chess, three other men to talk to, each as isolated as the other. That was a spaceman's life.

He couldn't dance. The inferiority complex caused by his lack of height had prevented him from the exhibitionism inherent in any form of dancing. Poor muscular development from lack of exercise made him avoid all athletics. He had met his wife by accident, and married her after a three-day courtship.

Socially he was a failure.

Physically he was a weakling.

Morally?

He sighed and glanced at Madge. That was what he had to find out.

He rose early next day, and stood at the windows watching the blazing sun rise into the heavens. Dew glistened from the emerald of the lawn, and a wisp of cloud hung like cotton in the azure sky. He sensed rather than heard Madge as she came close behind him.

"Our last day, Jim," she said gently.

"Will you be sorry to see me go?"

"Yes, Jim. I know what you are thinking but believe me there is no need for you to worry. I wish that you didn't have to go."

ATTENTION!

SCIENCE FICTION FANS

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"Maybe I needn't."

"Jim!" She pulled him around to face her. "Has something happened? Have you extra leave? Jim tell me!"

"No, Madge. I haven't extra leave." He looked searchingly into her eyes. "Tell me truthfully, would you like me to be at home all the time?"

"Not go away you mean? Of course I would, Jim. What wife ever wants her man to leave her?"

"Do you?"

She flushed, the delicate tide of red staining her pale features.

"Listen to me, Jim. What has happened is over. I can't live with you if you are going to doubt me. I know that I deserve it, but you must believe that it is all finished. I won't be a fool again. I love you, you must believe that."

She smiled and came into the circle of his arms.

"With you home there would be some meaning to our marriage. We could have children, and Jim, I do want children. Not in years' time when you've retired, but now when we are still young enough to enjoy them." She looked hopefully at him.

"Is there any chance of your getting a transfer to a ground job, Jim?"

"No, Madge."

"Then how . . . ?"

"I can resign."

"Resign!"

Something in the tone of her voice made him step back and look at her.

"Yes, resign. Quit. Leave the job. What's the matter?"

"Nothing, Jim, nothing." She bit her lip and stared out of the window. "Isn't there a penalty for lack of notice of intention?"

"Yes. Total loss of six months' pay. Why?"

"What would you do after, Jim? What other job would you take?"

"How do I know?" Irritably he strode about the room. "There must be something I can do. I don't expect as much money of course, but we'll get along." He stared at her. "Changed your mind about wanting me at home?"

"No, Jim, of course not, it was just that there are so many things to consider. We can sell the cars, move into a cheaper house, perhaps I can go to work. I still have friends at the teleradio studios." She smiled and looked about the comfortable furnishings of the room. "It will seem strange at first, but we'll manage."

"Wait a minute!" Jim looked hard at her. "We must have some money put away. Personally I've enough to cover the penalty, but surely you must have some of your own?"

"Yes, Jim, I have, but we'll need all that to keep us while you are looking for a new job."

"You talk as if I'm not going to get one. I'm a trained man, a spaceship captain, I can get another job easily."

"Yes, dear, I know, but you won't be getting the salary you are now. We'll have to economise eventually so why not begin now?"

"No reason," he admitted, then swept her into his arms. "It will be good to have you with me always," he murmured. "To know that you are waiting for me, and to be able to plan ahead. Seldon was right, a spaceman shouldn't

marry, if he does he should resign."

He chuckled and whirled her across the room towards the compact kitchen.

"Breakfast, and then I'll drive to the city and resign."

Almost he had forgotten the letters.

It was still early when he reached the city, and the streets seemed deserted. He swept past the spaceport, trying not to look at the slender spire of his ship, and directed the car towards the soaring bulk of Space Administration. He parked the car, and hesitated for a moment. It wasn't easy to throw away everything won throughout a lifetime without a struggle. A coffee bar stood near the great building, and he swung into it.

The place was deserted, or he thought that it was, it wasn't until he had slid into a booth that he noticed the occupant.

"Hello, sir. Strange place to see you."

Jim paused, half out of his seat, then smiled and settled back in his chair.

"Hello, George. Off duty?"

"Yes, sir." The gatekeeper stirred his coffee. "I've just been for a medical at Admin."

"Health O.K.?"

"Yes, thank you, sir." The man hesitated, his cup half raised to his lips. "Everything all right at home, captain?"

"How do you mean, George?"

"Your wife, was she well?"

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"My wife? Yes, I remember, I asked you if you had seen her." Jim forced a laugh. "Nothing serious, just a stomach upset, she's all right now."

"I see, I'm glad to hear it."

They sat in an uncomfortable silence for a minute or more. Jim stirred his coffee, sipped at the hot liquid, and stared at the gatekeeper. He had an impulse to talk things over with someone, someone who would understand, and he had always liked George.

"You've kept the spaceport gate for a long time now haven't you, George?"

"Getting on for twelve years, just before your time if I remember correctly."

"Quite a bit before my time, George. I've only been a spaceman for ten years." He hesitated, seeking for words. "George, have you ever known of any spaceman who resigned?"

"Resigned? Yes, sir, I have. Not many though."

"What happened to them?"

"A few made a go of things, most of them regretted it."

"I see." Jim stared down at his cup. "I'm going to resign, George."

"What!"

Something in the gatekeeper's voice made Jim glance at him with sudden suspicion. He looked at the man with fresh interest, noticing the slight almost boyish figure, the smallness, the lack of height. Little things came crowding into his memory, the pathetic interest in the flights, the personal interest he took in crewmen's worries, the menial job he held, but a job connected with space travel.

"You were a spaceman."

"Yes. I resigned—and lived to regret it." He looked at Jim with sympathetic understanding. "It's your wife isn't it?"

"Why should you think that?" Jim tried to restrain his anger, unjust as it was.

"It's always the wife. I've seen it happen before, and it happened to me." George sighed, staring into the past. "I met her on one leave and married her on a second. We were happy for a while, and then it happened. I couldn't blame her too much, I was away too long, and she was young and lonely. I forgave her of course, and resigned." He fell silent staring into the dregs of his cup.

"What happened?"

"The inevitable. I had nothing to offer her. I couldn't even get a good job. If we had had a child things may have been different, but it was the early days and the shielding hadn't been perfected. I couldn't father a child. For a while we got on well, then the little things began to catch up with me. The glamour died, the money stopped, our scale of living lowered. I tried to learn in weeks the things that normally take years. It was a waste of time, and finally she left me."

"Not all women are like that," protested Jim.

"No. Not all of them, but can you be sure? As a spaceman you have a certain amount of glamour, and remember that you earn ten times as much as you could on Earth. What can you do aside from piloting a spaceship?"

"I can get another job."

"Can you? You are a spaceman because you're small, and because you spent ten years in training. You are able to handle a ship because you've

grown part of it. To do that you've sacrificed everything else. There are other jobs, I know that, I've got one, but would you like to be a gatekeeper?"

He pushed away his cup and stood by his chair.

"I must go now, I've got to get back to the gate. Don't do it, Jim. Once you resign there's no going back. You're out, and you'll regret it the rest of your life."

"But what about, Madge?" Jim said desperately. "What about my wife?" George shook his head.

They didn't talk about it any more. The hours slipped into the past and night covered the sky. Jim lay sleepless on the unaccustomed softness of the bed, staring into the dark silence of the room. Madge breathed quietly beside him, her small features a pale smudge on the pillow surrounded by the aureate splendour of her hair.

Somewhere a clock chimed midnight. Today he must resign, or leave for a further three months.

He still hadn't decided.

He couldn't. It was too grave a decision. He could continue as he was; and risk losing his wife and all she meant to him. He could resign; and spend the rest of his life wondering if he had made a mistake. Madge had said nothing when he had told her he hadn't resigned. Watching her, he had thought that she had seemed pleased. They had made plans, tentative decisions which though sensible enough when talked about, now seemed to verge on the very edge of dreams.

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They would save their money. Madge would take a job to keep her occupied while he was away. He would keep an eye open for another situation. Dreams..

Wishful thinking. Plans made by children, hopeful plans but useless, because. . . He couldn't be sure.

He could never be sure.

Restlessly he turned on the bed and tried for sleep.

Dawn broke with a mist of rain, a gentle drizzle streaming down from sullen clouds and casting a film of wetness over the bleak morning.

Silently they ate breakfast, Jim refusing solid food, contenting himself with just fruit juice and coffee. Now that the moment of parting had come, he regretted his wasted time. It was always the same. He should have looked for another situation, he should have gone into the question of finance, he should have done a hundred things.

He had done nothing.

They used the closed car for the journey to the spaceport. Jim sat hunched in the seat watching the rain trickle down the windscreen, and tried to throw off his feeling of depression. Madge drove, her slender fingers resting lightly on the wheel, her small features vacant with thought.

They didn't speak.

An hour later the slender spire of the rocket ship loomed through the mist, and Madge braked the car just outside the gate. Jim hesitated, one hand on the latch of the door.

"Goodbye, Madge."

"Oh, Jim!"

Reluctantly he freed himself from the circle of her arms, and smiled down into her tear stained face.

"It won't be long, darling," he murmured. "You'll meet me?"

"Of course I will, and Jim—"

"Yes?"

"Don't worry. Please don't worry, I promise you that it won't happen again."

He nodded and kissed her again, then quickly before his resolve weakened, left the car.

The formalities were soon over. He checked in his belongings, stood on the scale, received his flight instructions, and left the hut.

Madge waved to him from the car, and he lifted an arm in answer. Seldon grinned at him from outside the gate, kissed a blonde six inches taller than himself, and ran through the gate into the hut.

Jim began walking towards the ship.

It rose before him, a dream of subtle curves and the ultimate promise of adventure. It was his life, his home, the achievement of unending years of effort. It was his responsibility, it was almost his God.

It was also his prison.

Sickly he walked across the wet dirt of the landing field. He wasn't worried—now, but he knew that in the next three months his doubt would grow, and grow, and grow. He had made his choice, his ship against the comforting knowledge of what his wife was doing, where she was doing it, and with whom.

It hadn't really been a choice at all, for he loved his ship, but . . .

Rockets weren't human.



Adventures In Time and Space. Edited by Raymond J. Healy and J. Francis McComas. Grayson & Grayson Ltd., London. 326 pp. 10/6.

When Random House, New York, first published the original edition of this book in 1946 it was practically the first science-fiction anthology ever produced—certainly the first *modern* collection of such stories—and by far the most ambitious in size and content. Its success started a sequence of anthologies which look like going on for ever, yet none of its successors, to my mind, have ever equalled the outstanding quality of the thirty-five stories contained within its magnificent covers. That is not exactly surprising, as the editors at that time had the whole field from which to choose their selection, whereas now many other publishers are vying with each other to produce the “best.”

That the British edition is but a shadow of the original is perhaps an unfair statement in view of the 997 pages in the American edition; under present day publishing conditions in this country such a volume would cost 30s. at least. So Grayson & Grayson have cut it down to our size—and pocket—and a reasonably competent job they have done with it, too.

All the eleven stories are good. There is Heinlein's excellent early story “The Roads Must Roll,” centred round the moving “ways” of the future; Gallun's memorial story of the twilight of Earth, “Seeds of the Dusk,” two delightful stories by Padgett, “The Twonky” and “Time Locker,” Harry Bates's classic “A Matter of Size” and Asimov's “Nightfall.” There is Bester's “Adam and No Eve,” and P. Schuyler Miller's “Sands of Time,” plus Cleve Cartmill and Webb Marlowe. Most pleasant of all, however, is to see British author Maurice G. Hugi's little gem “The Mechanical Mice” in the British edition. I feel that this is a fitting epitaph for a pioneer writer who did so much to further British science-fiction before he died in 1947.

The House That Stood Still. By A. E. van Vogt. Weidenfeld & Nicolson Ltd. 210 pp. London, 9/6.

This is not the usual thought-provoking story one expects from van Vogt, who has produced some outstanding concepts in the recent past. It is, however, a most complex story dealing with immortality, mind-reading and spaceships. The title refers to a house over a thousand years old which, because of its radio-active walls bestows immortality upon its residents, and those immortals have lived among Earth people for untold generations.

The story centres round an enquiring normal male who becomes involved in the ramifications behind the House, falls in love with one of the Immortals, and gets caught in the whirlpool of two murders, a spaceship and a threatened atomic war on the United States. That the murders are rather obscure red herrings deliberately drawn across the trail to mystify the reader is rather evident and are rather unsatisfying in their explanation.

As a science-fiction detective thriller it has all the necessary ingredients to confuse the reader.

JOHN CARNELL

Born in Captivity by Bryan Berry and **Beyond the Visible** by H. J. Campbell. Hamilton & Co. (Stafford) Ltd., London. 8/6 each.

One of the most difficult tasks facing a reviewer is to find a yard-stick by which he can express his ideas about a book. It is not enough for him to say that he likes or dislikes a certain book for, unless the reader knows the reviewer fairly well, such a statement is less than unintelligible, it is meaningless. Nor is it enough for him to condense the plot into a few paragraphs and leave it at that, for a story can only be judged by comparison with others in the same class as itself.

Here I am lucky enough to have two books by well-known British science-fiction authors, published by the same firm, of the same length and price and with similar backgrounds for the stories. In spite of the fact that comparisons may be odious here is an excellent chance to compare the works of Messrs. Berry and Campbell.

Both the books tell of individuals who come into conflict with the laws of the totalitarian societies in which they live. In both stories the main characters kill an official of the state and are then hunted by the police. In both stories the fugitives take refuge with the local underground movement (has there yet been a society which lacked a subversive movement?) and then survive the atomic war to end all wars. I am glad to say that the endings are different.

H. J. Campbell's story is the more complicated of the two. It contains the three primary S's of pulp fiction, sex, sadism and suspense and, for good measure, Viton-like entities created by radio waves. On the latter are blamed the belligerency and wars of the human race. Unfortunately his main character spends so much time racing around escaping from everyone but himself that he seems to be nothing but the shadow of a personality.

On the other hand, Bryan Berry has written a story about human beings. His main characters are a man and wife who come to believe that it is wrong to submit to anything but their own consciences. The story is set in the period after the mess of the Third World War has been cleared away and is essentially simple. Jet cars, rocket bombers, robots and androids have their place in it but they are only the background against which the tale unfolds. The characters are not just cardboard figures against the puppet theatre of the Universe, they live, have feelings and, too often, die. There is a sincerity in Bryan Berry's writing which is seldom found in the field of science-fiction.

Bryan Berry is one of the youngest professional writers of science-fiction in this country and, whilst sometimes lacking the self assurance of many of the old timers, he is developing a style of his own which promises to put him at the top within a very short time. H. J. Campbell has had more experience, both as an author and editor but, whilst his work is competent, to my mind it is only competent and lacks the originality of thought and expression found in Berry's work.

JOHN NEWMAN

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