NEW WORLDS
SCIENCE FICTION

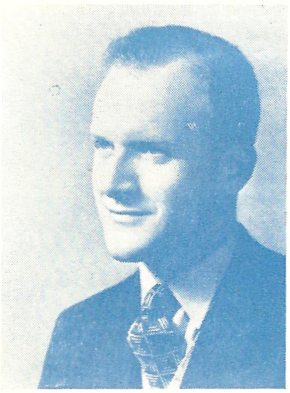
No. 40 2/-

NEW WORLDS
PROFILES

Charles Eric Maine

Stanmore

Middlesex



The pen-name of 34-year-old Liverpudlian David McIlwain who was a close pre-war friend of authors John Christopher and Jonathan Burke. Served as an R.A.F. signals officer during 1940-1946 and afterwards turned to TV engineering and free-lance journalism connected with that medium and radio. In 1951 he was appointed editor of a national television trade magazine published in Fleet Street, which position he still holds.

In 1951 he wrote his first radio play—"Spaceways"—which was broadcast by the BBC in their *Curtain Up* series in 1952; the same year a British company made it into a film starring Howard Duff and Eva Bartok, and then the enterprising author turned it into a book which was published by Hodder & Stoughton and subsequently Pan Books. As a serial it ran in South Africa's *Outspan*. Two further radio plays followed—"The Einstein Highway" and "Karnfeld's Hypothesis" — the former being used as the basis for his second book *Timeliner*, which has been published in both USA and Britain, and the latter now having been turned into a TV play scheduled for 30 minutes on Independent shortly.

Maine, who firmly believes in exploiting an idea in every medium, turned his next BBC TV play "Time Slip" into yet another film (see review in this issue) and then turned to writing three more novels—*Crisis* 2000 due in November, and *Escapement* (Spring 1956) and *The Isotope Man* (Autumn 1956). Invariably his plots have a crime or thriller angle which he believes broadens the market—and helps in widening the field of science fiction readership.

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TWO SHILLINGS

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Space Satellites

To a monthly magazine current news items can seldom be of great importance—by the time any reference can be made to the subject some two or three months will have passed before the reader will see the actual remarks, and the item itself long since indecently interred by the national press. However, the July news of space satellites is going to be with us for a long time and interest will increase as the time draws near for one country or another to ' officially ' launch their first tiny space stations.

I say " officially " because for the past two years odd scraps of information and gossip have trickled out of the U.S.A. which indicate that the satellite programme could be in a much more advanced stage than the current news would have us believe—and if one reads most of the semi-technical books about astronautics which have been published in recent years there are many underlying hints that trial rockets have already gone far higher than the mere 250 miles at which the " flying footballs " will circumnavigate the globe. Indeed, many correspondents of mine infer that American scientists have already placed a guided missile on the Moon—a project which Russia now openly admits as being one of her own immediate research programmes.

It is perhaps rather significant that very little new information concerning the region over 150 miles above the Earth's surface has been released since the " WAC-Corporal's " 250 mile trip into outer space on February 24th, 1949, and many people logically assume that in the ensuing six years American scientists have managed to place projectiles at far higher altitudes. In the heyday of the " flying saucer " craze three were several press announcements of satellite ' sightings ' and one saucer-researcher stated that as many as six were in orbit round the Earth, presumably put there by our guardian angels from Mars or Venus who have apparently been observing us for the past few thousand years. But those (alleged) satellites—too small to be seen casually in a telescope unless the observer knew where to look—could well have been the ' unofficial ' fore-runners of the 1957 satellite programme.

I was particularly impressed with the press furore following the initial American announcement of their programme to coincide with the 1957-58 International Geophysical Year—the news reached me about an hour before it was publicly announced in a telephone interview by ex-author Peter Phillips, now a feature writer on a London daily and as soon as the news was released on the radio I was inundated by telephone callers asking " What do you think of the news ?" Which

was rather a naive question to put to anyone who has been interested in the theory of astronautics for over twenty years !

The news did prompt me to turn back the leaves of my press cutting books and see what was happening twenty years ago. In 1936 the British Interplanetary Society had set up its H.Q. in London under the Presidency of Prof. A. M. Low—having been founded in the Liverpool area some years previously by a small but enthusiastic group of scientists and well-wishers—and as Publicity Director at that time and editor of the Society's *Journal* and *Bulletin* I was responsible for trying to interest the national press in presenting straight-forward serious news items to a public which had never heard of the word " astronautics." An almost impossible task, for the various science reporters on the newspapers had never heard of it either !

Most reports of BIS meetings were angled tongue-in-cheek and brought the usual rash of comic cartoons, readers' letters with the inevitable " *I fail to see what a rocket will push against once it leaves the Earth's atmosphere,*" and leader columns by " W.M." in the *Daily Mirror* headed " To the Moon," with suitable political asides, but Sir Ambrose Fleming wrote a thoughtful letter to the *Daily Telegraph* discussing the hazards to be faced in space flight and stimulated some interesting correspondence from readers.

Early in 1937 a group of youthful Manchester enthusiasts known as the Manchester Interplanetary Society gave the press some further fuel by conducting rocket experiments in Clayton Vale, which resulted in two minor casualties—at the resultant enquiry (they were summoned for contravening the Explosives Act of 1875) the 17-year old Chairman, Eric Burgess, successfully discussed for two hours the intricacies of Newton's Third Law of Motion with the Manchester stipendiary. Readers will no doubt recognise the name of an author of two recent books on space flight !

Later that same year, Ralph Dulin writing in the *Daily Mirror* at a time when the German Rocket Society was already making test shots with embryo V-2's at an old disused aerodrome on the outskirts of Berlin, pointed out that " militarism, the evil genius of science, is seizing (the science of rocketry) for destructive purposes" and then went on to write about an American millionaire who wanted to be buried on the Moon, concluding with " which will Time prove foolish: his confidence or the laughter of his critics ?"

The world has at last stopped laughing but there is not a lot of difference between the news content of to-day and that of 1936—even at that time Sir Ambrose Fleming pointed out the dangers of cosmic ray bombardment on Man in space, still no nearer a solution to-day.

John Carnell

Regular readers will remember the author's story "Fair Exchange" in the January issue, in which Earth's exploitation of galactic worlds first meets and outwits the Lutherians. Mr. Wright presents another such battle of wits in the following tale, equally as absorbing as the former.

THE CON GAME

By Lan Wright

Illustrated by QUINN

"What," enquired Hendrix, "in your opinion, is the discovery most likely to set the Galaxy by its ears?"

Johnny Dawson shrank slightly in his chair in a small, instinctive attempt at self protection. Hendrix plus a large black cigar plus a leading question added up to trouble in one form or another.

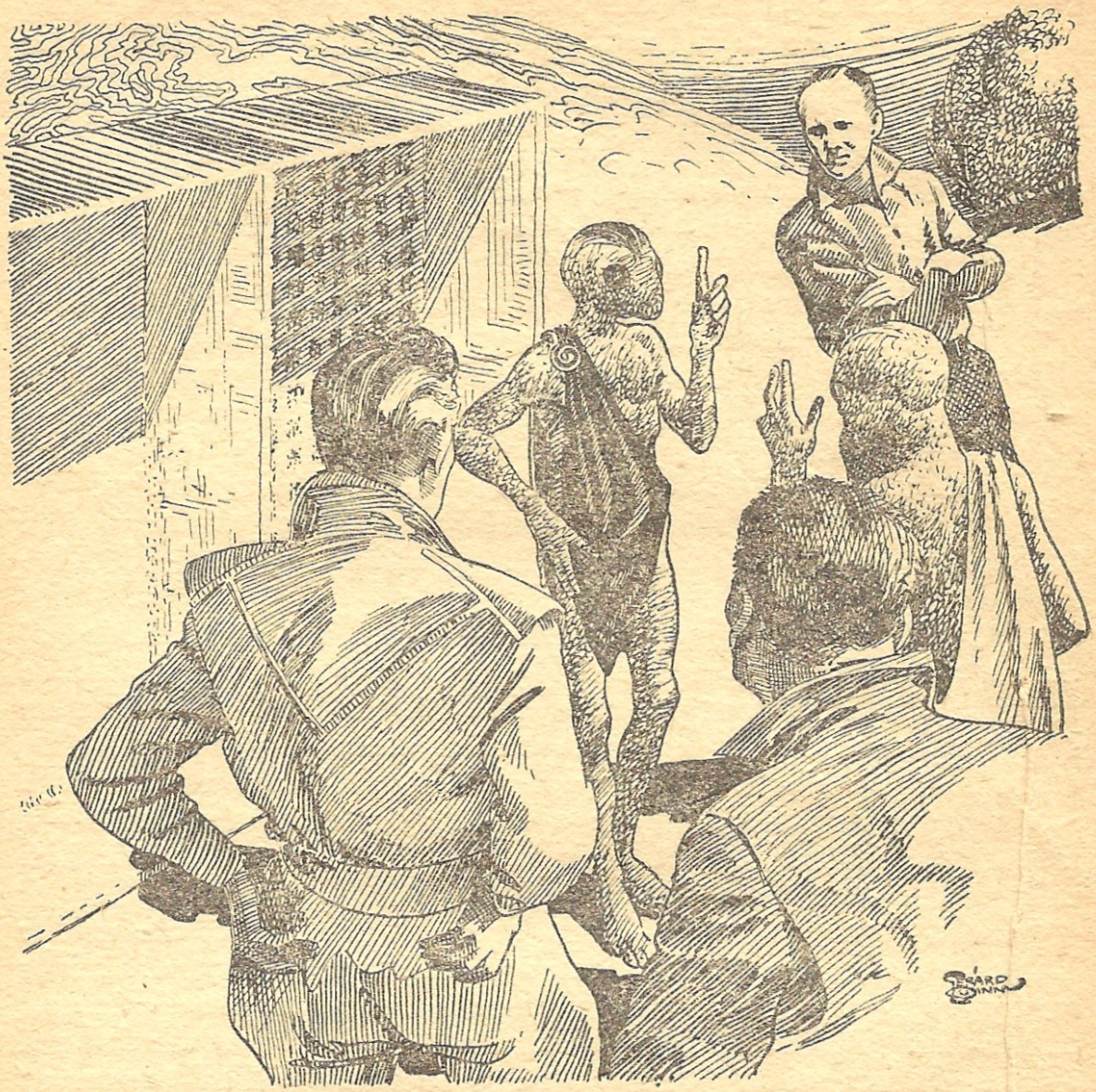
"A war?" he ventured half heartedly.

Hendrix eyed him disgustedly over the unlit cigar. "I said 'discovery'," he growled.

"Oh." Dawson tried to look suitably contrite, then, after a moment of thought he shrugged and said, "Could be anything I guess."

"Oh, no. Not anything." Hendrix shook his head. "Just one thing, that's all. And whoever finds it first has the Galaxy in the palm of one hand." He held up an open cupped hand and shook it in Dawson's direction. "Just like that."

Dawson frowned. Despite his apprehension such a statement could do nothing but arouse his interest. Hendrix wouldn't speak like that unless it was something really big, something that——



" Can you imagine," went on Hendrix, breaking the speculation of the younger man's reverie, " the situation if someone invented a matter transmitter ? "

" What ? "

" You heard me." Hendrix folded his hands together on the desk top before him and gazed grimly at Dawson. " Yes, a matter transmitter. Can you picture the general Galactic situation if someone came up with a method whereby you can put something in at one end—say on Earth—and it comes out on Fomalhaut Three a fraction of a second later ? "

Dawson whistled and ran a hand through his smooth, black hair. The picture generated was all too clear. It spelt ruin and chaos for the space flight operators throughout the Galaxy whether they were

human or otherwise—and most of them were human. The race that controlled such a system would control the whole Universe in much the same way as Earth did at the moment. Dawson sweated at the thought of it. At the moment Mankind held a virtual strangle-hold on the trade and commerce of the Galaxy because of the terrific strides they made in the development of space flight techniques. Any one of a score of other races would give their right arms—or such alternative part of their anatomy that fitted—to break that hold. Once it was broken there were plenty of dirty deeds on the part of Earth and her colonies and satellites to be paid off one way or another.

"You mean someone has a matter transmitter," he stated bluntly.

Hendrix nodded. "Not *a* matter transmitter," he corrected, "but several thousand of them, and they've been in use quite some time—hundreds of years at least, perhaps longer."

"A new race?" Dawson siezed on the obvious implication.

"Yes. In the Bootes Sector. A minor sun known as Corval with five planets. The second is inhabited by a race at an estimated D6 stage of evolution."

"D6?" Dawson repeated incredulously. "But that's ridiculous." Such a classification given by a fully qualified ecologist meant that the race concerned had not yet reached a general level of civilization sufficiently advanced for it to have even an elementary understanding of industrial principles. It was rather like having a Stone Age savage invent an electric torch. Such a culture couldn't possibly have a matter transmitter. Yet Hendrix was sitting calmly opposite him telling him quite seriously that they had.

"Exactly," commented Hendrix drily. "The fact of the matter is that the planet would have been ignored but for the fact that a minor survey group stumbled on the existence and everyday use of a matter transmitter. Further investigation turned up hundreds of the damned things. In fact, we might never have got to hear about it if the survey team hadn't been a little too anxious to file their report." He paused and brooded ominously. "From which you will gather we didn't make the survey."

"I thought not. Who did? And why were they so careless about it?"

Hendirx grinned humourlessly. "As to the first question, I'll give you one guess."

Dawson hesitated barely a second and then replied grimly, "The Lutherians?"

"Right in one. They filed a preliminary report which we got hold of through the registration bureau. We followed normal practice and kept a sleepy-eye watch on them——"

" Look, chief," broke in Dawson, " this is one job I don't want." He leaned forward urgently in his chair. " That Elkan business is barely six months old——"

" Shut up," said Hendrix coldly. " The job's yours already, sonny. As far as the Colonial Board is concerned you're their number one expert on the Lutherians."

" If the Lutherians have their way I'll be the number one ex-expert."

" They wouldn't pull anything like that. They haven't even begun to climb out of the mess you started."

" I wouldn't bet on it. Accidents can happen. Anyway, how come the survey team if they're in such a spot ? "

" Fitted out and despatched before the Elkan business started. Now shut up while I brief you. First, the Lutherians have been on Corval about two months so they've got more than a head start. We didn't get into the picture until just over a month ago when one of our patrol vessels just happened to intercept a despatch from the commander of the survey party."

" Just happened, eh ? " grinned Dawson.

" Since then," Hendrix ignored the interruption, " it's filtered through the usual official channels until the Board got hold of it yesterday." He shrugged and laid the cigar carefully on the ornate ashtray that stood at the side of his desk. " That's about all. At the time of its despatch the Lutherians hadn't cracked the case—they hadn't even got on speaking terms with the local inhabitants. We can only hope the position has remained static.

" There's a cruiser laid on to take you to Corval Two and some experts to help out with the technicalities. When you arrive you'll find a base already set up by a patrol ship. Anything you want just ask for. We'll back you all the way short of a shooting match, but we want this thing sewn up before the Lutherians clamp the lid down." He eyed Dawson bleakly. " You know what'll happen if they do."

—

Dawson arrived on Corval Two to find an air of open hostility pervading the planet. The Terran camp had been set up a bare twenty miles from the Lutherian base.

" After all," Hilder, the captain of the patrol vessel told him, " the nearer we are the better we can watch them."

Dawson doubted if the decision was a wise one, but the big, raw-boned officer had been johnny-on-the-spot at the beginning and was entitled to use his own judgement. He refrained from any comment and asked, instead, " Have you made any progress ? "

Hilder lifted his arms helplessly. "None. I've no fully qualified experts in my crew. Oh, one or two of the engineers have been poking around but they've found nothing. If it's any consolation the Lutherians have been working like fury ever since we arrived, and they've got nothing either."

"How do you know that?"

"They're still here, aren't they?" Hilder grinned. "Besides, I pay them a courtesy visit every two or three days. They don't like it, but they have to conform to the protocol, and there isn't much they can do about it so long as I keep to the courtesy part of it."

"What about contact with the locals?"

"Contacts in plenty. They might have been a bit more curious about us if the Lutherians hadn't got here first. Right now they are too used to interplanetary travellers to lay out the red carpet. They come around to look at us, and we go and look at them—there's quite a large settlement about three miles away over the ridge."

"Yes, I saw the lights from it as we came in," replied Dawson. "Anything else? Have you been able to look over one of these gadgets?"

"Oh, sure." Hilder laughed ironically. "I've had a couple of my boys camped by one ever since we arrived. They've stereo-ed it, photographed it, studied it, drawn it—everything but take it apart. And we know as much now as we did when we started—nothing. If the Lutherians had any hair they'd be tearing it out by the roots right now. Instead, we're doing it for them."

"Why not bring one over to the ship for study? It would save keeping your men away like that."

"That's a mistake the Lutherians made. Luckily I heard about it before we tried it." Hilder retorted sourly. "The natives nearly went crazy stopping them so they left it where it was."

"And they don't mind you examining it where it stands?"

"No, that's the funny part of it. They're nice and polite and tell us when they want to use it. We stand back and they get in it with whatever they want to shift, and bingo!" He snapped his fingers. "They're gone, just like that. Then our boys can look it over again."

"You make it sound as if these things are out in the open."

"They are," grinned Hilder. "I know what you're thinking. I already thought of it. Sure, the weather affects them. In fact we have concrete proof that they replace them every so often. We have found one or two that are of very recent origin compared with the weatherbeaten one that we are using for study."

Dawson frowned at the inconsistencies. If the natives didn't mind their works being examined why should they mind if someone wanted

to move one for examination ? He remembered the D6 classification and registered the fact as a superstition-based taboo.

" What about the language ? " he asked.

" There ain't none."

" What ? "

" That's right. They just stand around and move their hands and arms a bit, use a few almost unnoticeable facial grimaces, and that's all. We've taken stereos of hundreds of conversations—if you can call them that—in an effort to get some idea of the semantic patterns involved, but we've drawn just as big a blank there as with the transmitters." He grinned maliciously. " So have the Lutherians, fortunately."

Dawson digested the information gloomily. He wasn't too surprised that the Lutherians had no success. They were a bright but not brilliant race. They were essentially copyists with the plodding doggedness of the unexceptional ; and they relied on logic to an almost ridiculous degree. The flashes of creative genius that lifted the human race so high were missing from the racial structure of the Lutherians, and they had reached their present eminence in the Galaxy by a slow application of thoroughness over millenia of time. It was a process that seemed slow when compared with Mankind's own rocketing brilliance.

The fact that Hilder and his limited resources had obtained so little was not entirely surprising, although Dawson had hoped that in the two months he had been here the patrol captain would at least have made some progress with the language problem. Every patrol commander had a grounding in semantics for just such occasions as this, and that grounding should, under normal circumstances, have produced something.

He stood up at last and said to Hilder, " First thing in the morning I'll take a look at the gimmick your boys have got staked out. Until then I'm going to sleep on the whole sticky mess."

The ship which brought Dawson to Corval Two had landed on the dark side of the planet in the glare of landing lights and flares, which, though making the landing easy, had effectively camouflaged details of the alien landscape. Dawson's trip to the native township the next morning gave him his first sight of the planet.

It was neither encouraging nor impressive.

Towering cloud formations drifted in banked masses across a deep purple sky, and the light of the parent sun, itself well down in the violet areas of the spectrum, damped any slight variation there might

have been in the colour scheme of the landscape. The overall purple of sun, sky, scene and vegetation was tiring to the eyes and depressing to the spirit.

What vegetation there was appeared sparse and stunted. Broken rock formations formed hilly ridges across the smoothness of the land surface, and icy streams splashed their frothy way along the valley floors between the rockbound ridges. The ridges were none of them more than a hundred feet high, and the streams could all be crossed by one big stride. It seemed that rivers and mountains were non-existent, and Hilder confirmed it when Dawson queried the fact.

They flew over in the patrol ship's 'copter, and with them went Ryan, the physicist who had travelled with Dawson from Earth. He was a small spare man in his late thirties, thin faced and merry eyed, but with the detached air of the researcher. When he moved though, it was with a purposeful air, clearly that of a man who knew exactly what he was doing.

If the landscape was depressing the township was positively appalling. From the air it looked to Dawson like an old print he had once seen of a medieval city. The houses were of large stone blocks, built in a haphazard fashion so that the earthen streets dividing them twisted and and turned in mazelike confusion in every direction. After the orderliness of Terran culture the whole scene was a nightmare.

" Pretty, isn't it ? " remarked Hilder turning his head from the pilot seat.

" Revolting," replied Ryan. Dawson was speechless.

" We chose a transmitter on the outskirts of the town," went on Hilder. " That saved us having to put up with too much of the filth and rubbish of the town itself."

" Very good of you, I'm sure," said Dawson gloomily. " And these are the people who have invented a matter transmitter ? "

" That's right."

" I don't believe it," put in Ryan.

" You'll see in a minute."

Hilder brought the 'copter down in an open space a little away from the edge of the town. As they came to rest two figures came towards them.

" That'll be Collins and Hagerty," Hilder told them as they climbed down to the dusty earth, and he introduced them casually to Ryan and Dawson as his " two boys ".

Collins, a red haired youngster, was cheerful enough to crack a few jokes in answer to Dawson's questions, but Hagerty, a stoop-shouldered man with a ray burn across one cheek, was gloomy with pessimism.

" So I can take it you've found nothing," said Dawson, his questions ended.

" You can take it," replied Hagerty. " For my money you can keep it. We've been stuck out here practically the whole of two months, and the smell is getting me down."

" Where's the gadget ? " enquired Dawson.

Collins pointed to a street that ended some fifty yards from where they stood. A group of figures moved restlessly at the edge of the plain. " About ten yards down that alley," he said. " Just about where that group of natives is gathered. I can recommend an introduction if you've not already had the pleasure."

Hagerty giggled nastily.

Dawson grunted, and they moved off across the dusty, uneven plain.

At close range the natives were as unimpressive as their world, and as Hagerty had remarked, they smelt. It wasn't an unpleasant odour, but it was one that clung to town so that every breath of the heavy air was clogged with the almost indefinable scent. They were shorter than Dawson by a good foot, and thin to the point of emaciation. They were covered with a thin coat of stiff, purple fur, and their eyes were large, lidless orbs. The orifice beneath the eyes could hardly be called a mouth, and there was no evidence of any oral or nasal appendages. In every case a single garment of roughly woven cloth was the only item of clothing.

The matter transmitter turned out to be a double cubicle of dully polished metal ; each half was roughly three feet square and slightly over five feet tall. Each was open in the front. The metal looked rather like lead, but there was a sheen to it that Dawson had never seen in that similar metal. Warily, he poked his head inside the left hand cubicle. One wall was covered with etchings cut deep into the metal with obvious attempts at regularity. When he pointed them out to Hilder, the captain replied, " They have something to do with the operation of the contraption. If anyone uses it you'll see just how."

" But this one has no marking at all," pointed out Ryan as he investigated the second half.

" That's the receiving portion," Collins told him. " They're a bit fussy about us looking at that section, probably because it would be a bit messy if one of us were inside when one of them came through."

Ryan poked around aimlessly for several minutes while the others watched, and when, at last, he straightened up and brushed some dirt from his hands, Dawson asked him, " Well, what do you think ? "

The scientist shrugged. " I don't know. The walls seem to be solid enough but they're pretty thick. The mechanism could be

inside them or it could be below ground level. One thing puzzles me, though. Why are they all outside ? Are you sure there are none in any of the buildings, Hilder ? "

" I'm not a hundred percent sure, no. But all the buildings we have looked into are just filthy hovels, low ceilings, dirty floors, precious little light. We're pretty certain there are none under cover."

" What about the metal ? Have you analysed any of it ? "

" No. After the trouble the Lutherians had we figured there might be more if we started carving the place up."

" Take a chance," Dawson told Ryan. " You'll only want a few shavings, won't you ? If they seem to object you can stop at once."

Ryan nodded and took out a small plastic tool case from an inner pocket. The natives watched interestedly, and the Earthmen warily, as he knelt and shaved a few slivers of metal from low down on one wall.

They made no move to stop him.

Hardly had he finished than Hilder murmured, " Here we go," and one of the furry creatures padded up to the transmitter and entered the section with the wall markings. Ryan and Dawson watched as closely as they could while the creature's four-fingered hands moved over the wall patterns. It touched perhaps six of them in rapid succession, dropped its arms to its sides—and was gone.

Dawson swore vividly and Ryan uttered a gasp of utter surprise as they gaped at the empty booth. Behind them Collins and Hilder laughed outright and Hagerty sniggered morosely.

" Good trick, eh ? " remarked Hilder.

Dawson clamped his lips into a tight, thin line, and turned away towards the 'copter. " Let's get back and start the analysis of that metal," he snapped. " After that we'll think of something else to keep us busy."

They crossed to the 'copter in silence while Dawson brooded over the concrete evidence he now had that a matter transmitter did, in fact, exist. He realised that up until now he had taken the reports with an unconscious pinch of salt ; now that lighthearted approach had been shattered by an indisputable demonstration. In ten seconds the seriousness of the position had been brought home to him well and truly, and he didn't like the sensation that went with the realisation.

When they reached the Terran base again another shock was waiting for Dawson. The watch officer from Hilder's vessel reported that another Lutherian ship had arrived soon after they left for the settlement. They had seen it as it passed low over the horizon some miles to the southward of their own encampment.

" Soon after it landed we received a message over the video for Mister Dawson," the officer finished.

Hilder glanced at him with a slight frown, and Dawson's stomach turned over sickeningly at the implication behind the news. He guessed the import of the message even before the officer handed over the single sheet of paper, and his face was grim as he read the single line of printing and then passed it wordlessly to Hilder.

" Ex-governor Arvan requests the pleasure of a visit from Mister Dawson at his earliest convenience," read Hilder wonderingly. " Now what in hell does that mean ? "

" Just what it says," replied Dawson wearily. " Ever hear of Elkan, Hilder ? "

" Of course, who hasn't. So what ? "

" Arvan was the Lutherian governor of their half of the planet before we bulldozed them out of it. I'm not exactly popular with him—or with any other Lutherian for that matter."

" How in hell did he know you were coming here ? "

" Don't be a fool. You can bet your life they've been watching every move we made ever since this business started. They know what's at stake as well as we do. They'd make it their business to know."

" Are you going ? "

" Of course I'm going. If I try to duck it our whole position might be affected adversely. I'll borrow your 'copter and go over right away and get it over with."

" You want a pilot ? "

Dawson shook his head. " No, one head in the lion's den is enough."

From the air the Lutherian camp appeared almost a duplicate of the Terran base. Dawson could see the small hull of the survey vessel lying dark against the purple landscape, and about a quarter of a mile away the looming bulk of an interstellar cruiser dwarfed the smaller ship. Clearly, Arvan had travelled far and fast.

He landed nearer to the bigger ship, climbed from the 'copter, and walked towards it through the uniformed groups of Lutherians who had gathered to watch his arrival. It was his first meeting with the short, rotund race since the trouble on Elkan, and the atmosphere could have been cut with knife. Not for the first time since this mission had started Dawson felt an apprehensive twinge of fear shiver through his nerves.

They watched him closely and intently, almost it seemed that they didn't want ever to forget the man who had broken their bid for

Galactic parity with Earth. There was open hatred in more than one pair of cold, unwinking eyes, and Dawson wondered with macabre fascination if that hatred was strong enough to make one of them shoot him where he stood.

He approached the landing ramp which led up to the black circle of the open lock, and paused as a Lutherian officer appeared in the entrance.

"John Dawson to see Arvan," he announced flatly.

The officer stared down at him unwinking and unmoving for so long that Dawson began to think his message had either not been heard or else not understood. Then, abruptly, the Lutherian stood back and beckoned him to mount the ramp.

He had to duck in places along the narrow corridors within the vessel, and the low deckheads were a constant reminder of his advantage in height over the stumpy race who built the ship. He wondered idly if there was such a thing as a racial inferiority complex ; if there was then surely the Lutherians suffered from it to a minor degree at least.

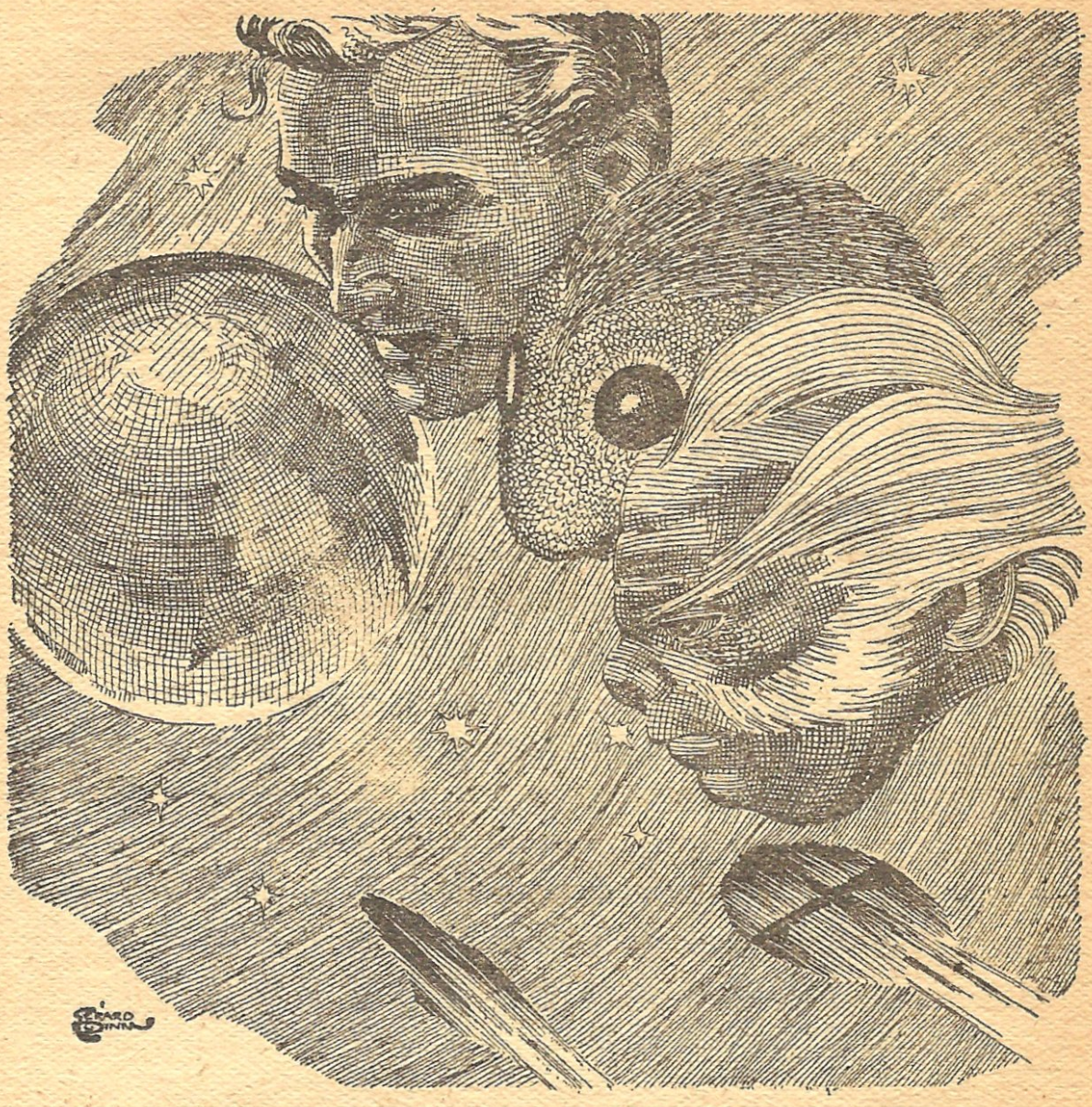
Arvan, the ex-governor of Elkan, greeted him with icy politeness in a large private cabin. He spoke no welcoming words in his slow, slurred but precise English, instead he bowed in a ludicrous attempt at a purely Terran gesture. He waved Dawson to a low, armless chair that stood beside the raised divan on which he himself was seated.

"I have asked you here to warn you, Mister Dawson," he began unemotionally, but his eyes betrayed his distaste and dislike. "You know the hatred that we bear you in particular and your race in general. You know the steps we would take to revenge ourselves upon you if it lay within our power. We have, here on Corval Two, an opportunity to re-establish ourselves within the Galactic framework of races." He paused as though seeking for words to continue. Then, "There is upon this planet a means whereby we can regain our rightful place in the Universe and, at the same time, extract payment for the wrongs that were done to us on Elkan. Make no mistake, Mister Dawson, we shall let nothing stand in our way."

"I appreciate the sentiment, but what if we break this thing before you do ?" asked Dawson quietly.

"I do not think that will happen. You see, we have the incentive of hatred and revenge to drive us. You have nothing but the desire for power. It is usually the stronger emotion which brings forth results." The large round eyes glowed with the intensity of Arvan's conviction.

Dawson smiled mirthlessly and shook his head. "You're wrong, Arvan. I know how wrong was the thing I did to your race on Elkan, but my people only wanted results. When I returned to Earth and



told them just what had happened and just what it would mean in the long run, those who gave me my orders realised what an irrevocable mistake had been made. Now we have something more than just the lust for power to drive us on. We know what will happen if you get control of this thing and we don't. We know that in a few years Earth will be finished, our space fleets ruined and crippled, our trade and economy broken, our whole way of living destroyed." He rose slowly and stood looking sombrely down on the seated Lutherian. "And when all that has happened we know that the Lutherians will be waiting to take advantage of our weakness to wreak their vengeance upon us. You have underestimated the stakes, Arvan, you have revenge as your motive—we have fear."

There was a long pregnant silence, and then Dawson asked mildly, "How did you know I was coming to Corval?"

Arvan stirred as though from a dream and replied, " I did not know. I was sent here as soon as it was known that an Earth ship had landed. I am by way of being considered an expert on Terran affairs, that is why I was sent." There was irony and bitterness in his voice as he spoke. " I heard of your probable presence when I was in transit here."

" And you sent for me to warn me ? "

Arvan nodded.

Dawson shrugged helplessly. " There is nothing I can do. I shall be relying on my experts, and so will you. One of us will be the first, and nothing either of us can say will drive the other away before that time comes. Afterwards——" he shrugged again, and turned towards the door. Afterwards was something he didn't want to think about much less talk.

Back in the Terran camp Dawson found nothing but idleness and boredom. He was not an expert like Ryan, the physicist, or Henshal the racio-ecologist. Hilder still played around in his temporary role of semanticist, and all the others in the crews of the two ships had their everyday duties to perform. All Dawson could do was to co-ordinate the efforts of the group and direct the work along the channels that the others advised ; and that required little enough time. He brooded in his cabin by the hour, aware that he could do nothing to hasten progress, and fearful that at any moment the news would come through that the Lutherians had left the planet. With that news would go the secret of the transmitter.

A minor consolation was the announcement, two days after his visit to Arvan, that Ryan had completed his analysis of the test samples of metal from the base of the transmitter, and had identified a completely new element.

" Of course, I can't tell what use it will be," he told Dawson. " That'll be up to the boys in the labs back on Earth. I haven't the equipment or the time to start experimenting with it here. One thing is certain, though, any new metal of this sort must have something to offer."

" How about supplies for experiments on Earth ? " asked Dawson.

" Shouldn't be any trouble. I've arranged with Hilder for three teams to start geological surveys for ore seams. A few tons of ore will be enough. All we have to do then is register the claim for the mineral rights of an undeveloped world, and leave the rest to the bright boys. In a few months or a year they'll turn something up."

Dawson laughed harshly. " Oh, great. And that's another scheme that we can toss out of the window."

Ryan gaped at him blankly. " What in hell d'you mean by that ? "

" The Lutherians have been here nearly three months," snapped Dawson. " Do you think for a minute they'd miss a small trick like registering their own claim as soon as they'd made a survey ? Well, they didn't. They've got this place sewn up—have had from the start."

So even the minor consolation was shattered.

Dawson paid daily visits to the site of the transmitter where Collins and Hagerty had been joined by Henshal and several others to form a permanent camp. The natives didn't object, and they used the apparatus just as before, coming and going through the two cubicles as if the Earthmen hardly existed.

Henshal complained gloomily on one occasion that the whole thing was impossible.

" Oh, yeah ? " retorted Dawson savagely. " Then how in hell did that get there ? " He pointed to a thin, furry creature who had materialised at that moment in the receiving half of the metal box.

" I know." Henshal waved a hand in limp despair. " Look, Johnny, why don't we admit we're licked ? We've done everything but take the damned thing apart, and we still haven't the faintest idea what makes it tick. Whatever we're up against, it's something outside our own particular limitations, and we won't unravel it if we stay here a hundred years."

" What about the Lutherians ? "

" They've got as much chance as we have."

" Which is why we stay," snapped Dawson. " While they have a chance, so have we. Do you know what'll happen if they get in first ? "

Henshal sneered. " I'm tired of hearing it. Whatever it is will keep for fifty or sixty years, by which time I won't be around to worry."

Dawson's lips thinned angrily. " Just find it, that's all, and find it first." He turned abruptly on his heels and went back to the 'copter.

As he flew back to the base camp he wondered privately if Henshal wasn't right. There wasn't the slightest clue to the alien science which had made possible the matter transmitter even though they had subjected it to the most searching examination human instruments and ingenuity could make. Like the rest of the party he just could not see how such a degenerate race as now inhabited the planet could have been responsible for such an invention, and yet there was, as far as they could tell, no older and higher form of civilisation that could have handed it down.

He landed the 'copter beside the patrol vessel and Hilder came out to meet him, grim faced and worried.

" The Lutherians have snatched a transmitter," he announced flatly. " Their survey ship took off an hour ago and a couple of my men have just got back from a scouting trip to find out the reason for it."

" Oh, no. That's all I needed," groaned Dawson. He sighed and shook his head. " All right, let's have the rest of it."

" Nothing more to it," shrugged Hilder. " They sent in a raiding party at dawn when the thing was hardly being used, dug up the foundations and lit out before anyone knew what was going on."

" Anyone get hurt ? "

" Yes. A couple of natives happened to be around and they tried to stop it happening. They got shot up, but it's all quiet now. All the natives have cleared out of the area and the Lutherians have staked out another transmitter for local investigation as before."

" You know what that means ? " queried Dawson. " Once their big labs get on the job they improve their chances of cracking the problem by about three hundred percent. They'll take it apart piece by piece, and that'll be the end. The language problem won't worry them any more."

" Do you think we ought to do the same ? "

" No. They've got a shorter haul home than we have. The answer for us is here, Hilder, whether we like it or not, and the key to the whole damned business is their language. Once we crack that we can ask questions and get answers. After that the Lutherians can pinch a hundred of the wretched things and it won't matter in the least." He grinned wryly. " Better pray for it, Hilder. That first chink of light needs to dawn over us pretty quickly—or else ! "

Three days later the first chink of light appeared.

Henshal and Ryan spent a day in the labs aboard the cruiser carrying out minor experiments, and the next day, soon after breakfast, they left for the transmitter site. Dawson retired to his cabin gloomily resigned to making out a report for submission to the Colonial Board and to Hendrix. It wasn't going to be a good report, and his main difficulty was covering up a simple statement of ' no progress ' in diplomatic and optimistic phrases. By lunch time he had written half a page and incurred a raging headache.

The gong for officers' lunch sounded dimly through the ship and he threw his stylopen angrily across the desk, cursed Hendrix and the Board with fluent emphasis and slammed the cabin door hard as he went out.

Outside the mess Hilder met him. " Just coming for you," he grinned. " Ryan's on the intercom from the site raving like a lunatic."

Dawson's headache vanished as if by magic. "You mean he's got something?"

"I think so, but he wouldn't tell me what. Just told me to get hold of you as quick as I could."

Dawson nodded. "I told them all not to broadcast it if they found anything. The fewer who know about it the better."

Hilder's smile vanished. "But damn it all——"

"Nothing personal," Dawson broke in soothingly. "We're far from home though, and I don't want a word of it to get out until we hit out for Earth. The Lutherians just might be crazy enough to try and pull something if they got wind of the fact that we'd cracked it and were preparing to pull out."

"All right, if you say so."

"Is the transmission being scrambled? I don't want the least possibility of a leak."

"Sure, first thing I did."

Dawson turned forward to the communications room and Hilder went slowly into the dining cabin. Ten minutes later Dawson sat down to lunch smiling blissfully.

"It's all over, Hilder," he said. "Just a few things to sort out and we can go home."

Hilder sighed with relief. "Good. The suspense was getting me down. Shall we pull the site team in?"

"Are you crazy? And give the whole game away? No we don't pull them in. We keep them out there until the whole things sewn up." He smiled contentedly. "There is the little matter of the mineral rights to this planet to be settled with the Lutherians."

"But you can't do anything about them," protested Hilder. "They're all registered and titled."

"We don't know what we might be passing up. Besides, if I can arrange a legal re-assignment of the mineral rights——"

"What?"

"Oh, I think the Lutherians will agree—if I offer them the secret of the matter transmitter in exchange."

Hilder gaped in open horror. "You'll be hung," he gasped. "Why, that'll cut our throats once we're back on Earth——"

"First thing after lunch," broke in Dawson unheeding the outburst, "I want a 'copter to fly over and see Arvan. I'll go alone. When I've gone I want you to lay on an open circuit, sound and vision, to Earth, Luther, and each of the three Planetary Registration Offices. Stated intention, the re-registration of this world in the name of Earth for all rights of mineral exploitation. Then cut in with Arvan's ship to complete the link up."

"Just wait till Hendrix gets his hands on you." breathed Hilder. "I wouldn't be in your shoes, sonny."

"I'll handle Hendrix," Dawson replied grimly. "Just advise Arvan that I'll be over and leave me to handle the rest of it. One other thing, as soon as the circuit is open and the transaction is completed, get the patrol ship into an open orbit around the planet with the crew at action stations."

Hilder eyed him questioningly for a second and then nodded. "For a minute there you sounded like a man who just might know what he's doing. I only hope you do."

Arvan received Dawson in the same cabin as on his original visit, and his greeting was even more perfunctory than before.

"I can think of no good reason for this visit, Mister Dawson," he said as soon as Dawson had seated himself. "Unless it be that you have come to bargain as a result of hearing that we have sent a transmitter for investigations on our home world."

Dawson smiled. "No, Arvan. Though I must admit that news did cause me some apprehension when I heard it. I was afraid there might be a native revolt because of it. No, that wasn't the reason I came."

"Then——?"

"I thought you might like to know that we have solved the secret of the matter transmitter."

Arvan sat as if carved out of stone, his eyes fixed unwinking and with shocked surprise on Dawson's face. Dawson smiled gently and returned the gaze as steadily as he could.

"I do not believe it," the Lutherian breathed at last.

Dawson shrugged and stood up. "All right, if that is your attitude then there is no point in my staying."

"No, wait." Arvan raised a conciliatory hand. "There is more to your visit than just this desire to boast of your knowledge. I—I will presume for the moment that what you say is true, and ask you why you have come to tell me in person."

Dawson sat down. Arvan had swallowed the bait, now all he had to do was to force home his advantage as convincingly as he could.

"I came to make a deal with you." Dawson paused to allow the statement to sink in and to give Arvan time for some private speculation. Then he announced flatly, "I want the mineral rights to this planet, and in return for them I am prepared to give you the secret of the matter transmitter."

As he finished a dead silence fell like a pall over the cabin as Arvan looked at him with uncomprehending bewilderment. Dawson could

almost see the incredulity chasing the distrust and suspicion through the Lutherian's mind.

" I do not believe you," said Arvan.

" That is why I came myself. If I lie to you," Dawson shrugged, " you hold the body."

" But there is no reason for this offer," insisted Arvan. " We have analysed the mineral resources of this planet probably more thoroughly than you have. The only thing that is in any way out of the ordinary is the metal used in the construction of the matter transmitter." He paused as understanding seemed to dawn. " I believe I see it. Yes, you know how the transmitter works, but you know also that you cannot build new ones without the metal." Arvan nodded. " You are a clever man, Mister Dawson, but I do not think I shall fall into the trap." . .

Dawson smiled encouragingly. " You're too suspicious. The metal has nothing to do with it. So far as I am aware you could use steel or stellium, osmium, even gold if you want to."

" You expect me to believe that ? "

" No. That is why I came myself. I have arranged an open circuit to all the responsible authorities for the re-registration of the mineral rights in favour of Earth. It can be done from this ship. Once that is accomplished I will give you the secret of the transmitter." He leaned forward in his chair. " I'm doing this because I think my people can make quicker use of this knowledge than can yours. You're nearly bankrupt as a result of that Elkan business, and you haven't got the resources to exploit such knowledge. In return for that gamble we want to take another bet on the resources of this planet. For that we are prepared to share our knowledge with you."

" And once the transaction is complete ? We might find that you know nothing."

" Make it a term of the re-registration," Dawson told him. " Anyway, I'm sure you've got hypnodrugs to make sure that I tell the truth."

Arvan sat back, his round, pudgy chin cupped in his left hand. Dawson said nothing. He lounged easily in his chair, utterly confident of the outcome of his proposition. Arvan was in no position to argue. He had to take the gamble for what it was worth at its face value. True, the Lutherian had been quick to spot one of the inconsistencies and jump to the conclusion that control of the transmitter rested on control of the metal ; Dawson only hoped that his assurances would be believed.

He could almost see Arvan's thought patterns following his own, and at last the Lutherian looked up and said, " I have no choice,

Mister Dawson. I agree to your terms. One thing," he hesitated, " what would happen should I refuse to bargain ? "

" We leave you here to try and find out for yourselves."

" By which time it may be too late." Arvan nodded slowly. " Very well, we will arrange the details now."

Even though he was almost assured of success Dawson felt tense and strained as the transfer was made from the communications centre of the Lutherian ship. The one factor which relieved his feelings and almost made him laugh hysterically, was the grim, ugly face of Hendrix on the screen from Earth. Hilder, with some asperity and humour, had arranged for Hendrix to be the Terran representative at the six way conference.

It took barely fifteen minutes and the last words were spoken by Hendrix who said bleakly, " Call me as soon as you get back to your own base, Dawson. I want to talk to you."

Dawson smiled and nodded. It was a moment of almost pure joy to him to know that Hendrix was going to dangle for another hour or two without knowing what was going on.

Back in Arvan's cabin Dawson and the Lutherian leader were accompanied by a doctor and two technicians with a couple of other senior officials as witnesses. The technicians had an electronic recorder with which to record Dawson's statement, and a stereo camera for a pictorial summary to be made.

In response to Arvan's request Dawson stated solemnly that he was taking a drug injection of his own free will and purely to enable the Lutherians to judge the truth of the statement he was about to make. No coercion was involved and no responsibility for any consequences that might arise could be laid at the Lutherians' door.

He grinned as he finished. He could almost hear the sighs of relief as the tension lifted slightly from the room. At last, Arvan believed him.

He offered up a silent prayer as he felt the prick of the doctor's needle, and, after a few moments a dim haze enveloped him so that he seemed to be floating free of all material things. The haze deepened and thickened and the room around him shimmered into dissolution to be replaced by a fantastic dream world into which he flung himself with uninhibited carelessness.

Later he awoke.

Arvan's hand was hard against his face as the Lutherian slapped him viciously into wakefulness. He moved his head dazedly to try and avoid the stinging blows. He lifted one hand to try and ward off another slap but he was too weak and it knocked his head hard

to one side. He ducked abruptly and lifted both arms to shield his head, and shouted hoarsely, "All right, all right. I'm awake."

Arvan stood back and Dawson looked at him warily through clogged eyes. The Lutherian stood stiffly before him his rotund face devoid of any emotion. Only his eyes flashed with vicious hatred.

"I should kill you, but I fear a quick death is too good for you. I fear too that the consequences are not worth the accomplishment." His voice was shaken and bitter. "I did not think that even you would stoop to cheap commercial swindling."

Dawson smiled wryly. "Not cheap, Arvan. We took a gamble and so far it has come off. It may yet fail. No one knows yet if this new metal will have any commercial use——"

"Everything has some commercial use," broke in the Lutherian. "You do not fool me, Mister Dawson. You know as well as I do that a new discovery such as this metal can, in time, affect the entire Galaxy. It may be so in this case."

Dawson shrugged. His head ached slightly, and there was a feeling of anti-climax now that it was all over. He just wanted to get back to his ship. "If that's all," he said, and stood up slowly.

Arvan smiled grimly. "No, that is not all, Mister Dawson. We have not decided what to do with you. We may think of a convenient accident, something that——"

"I wouldn't try it," interrupted Dawson coldly. "Our patrol ship is cruising around up there, and if I'm not back when your ship takes off you'll be blasted out of this damned purple sky."

"You wouldn't dare."

"And neither would you. Forget it, Arvan. Go home and forget about it. We just happened to be a bit smarter than you, that's all." Dawson walked out of the cabin and no one moved to stop him.

Not until he was five hundred feet up in the 'copter and ten miles away did he begin to feel happy.

On the video screen from Earth Hendrix' face was blacker than ever. It was clear to Dawson that his boss had been stewing over the facts of the case for the whole period of time that had elapsed since the hookup on the Lutherian vessel.

"What's the weather like with you, chief?" he enquired as soon as he got to the screen.

"Getting blacker by the minute," rasped Hendrix. "Are you nuts, Dawson? Setting up a deal like that. I'll have your head when you get back."

Dawson laughed. "You haven't asked me why," he chided gently.

The black cigar moved ominously between Hendrix' lips. "All right, say your little piece, and it had better be good. I've had just about enough of your tricks, Dawson, and this is the last one I'm taking. Go ahead, I'll co-operate. Take all the rope you want and hang yourself, and then let me nail the lid down on your coffin."

"Well, now. Where to begin——"

"How does it work?" bellowed Hendrix. "Remember? That's what we want to know. How does it work?"

"It doesn't," replied Dawson.

A deathly silence spread through the cabin and on the screen Hendrix' face assumed a sphinx-like immobility. Ryan chuckled appreciatively and there was a strangled gasp from Hilder.

"Say that again," demanded Hendrix.

"Sure. There is no such thing as a matter transmitter," Dawson spoke each word slowly and clearly. "There never has been, and as far as I can see at the moment, there never will be."

"But——?"

"I'll let Ryan tell you. He's the expert." Dawson grinned and gave up his seat to the physicist.

"To begin with," said Ryan in much the same tone as he would have used to a class of students, "everyone thought the base of the problem lay in solving the semantic difficulty—and there lay the first mistake. The snag is that there is no language. This is a race which never developed speech and hearing because they have no organs for it—no ears or vocal cords. When that was realised everyone jumped to the conclusion that the manual gestures and facial grimaces, slight though they were, formed some complicated semantic design. That was where they were wrong again. The gestures had only a subsidiary meaning as they have on Earth to supplement normal conversation, and those meanings are quite unimportant. The main business of conversation and communication is carried on by telepathy."

"What? You're crazy," howled Hendrix.

"Oh, no, we've proved it," replied Ryan.

"But what's all this got to do with the matter transmitter?"

"Everything. You see, once we found that the entire race was telepathic it was only a step to see the rest of it. Besides that these people are also teleports and telekineticists."

"I never heard such drivel in my life," raved Hendrix. "Dawson, do you mean to sit there and tell me you believe this maniac?"

"Shut up," Dawson told him coldly. "You sent me out here to do a job. Well, this is it. Whether you like it or not, this is it. Go on, Ryan."

Ryan sighed. " There are only the technicalities left. The double boxes of metal which we thought were transmitters were nothing of the sort. When you think about it teleportation has its disadvantages. You might go somewhere and find the place already occupied by a chair or a table, worse still a building. You can imagine the results. These people got over the problem by laying down specific places where they could move from and to. They use the same system for using small articles of a size that can be carried. The etchings on the wall which we thought were something to do with the operating mechanism were nothing of the sort. They were just a means of orientation, much as you might use a route map back on Earth." Ryan shrugged. " There is always the danger that two of them might arrive at the same destination at once but the odds against are pretty high when you come to work it out. And that is all there is to it. It's just as simple as that."

There was a long pause. Hendrix said, " You're sure of all this ? "

" Positive," retorted Dawson. " Now the Lutherians know as well, but we've got the planet all nice and legal. And that ought to make you very happy."

Hendrix considered him from the screen and a slow, slight smile lighted his features. " Yes, you did a good job there."

" I don't think so. I just gave the Lutherians another nudge in the wrong direction," snapped Dawson. " And I don't think they'll let it ride much longer. Just tell the Board about it. It ought to make them very happy."

Dawson leaned forward and cut the switch. Hendrix' surprised face faded from the screen.

" Clear for Earth, Hilder," he told the captain. " The job's finished," he paused thoughtfully, " or maybe it's only just begun."

Lan Wright

This Month's Cover

Artist Bradshaw envisages the ultimate requisitioning of ground adjacent to London Airport by a " British Interplanetary Commission," from whence ferry rockets to a space station outside the atmosphere will take off. In the foreground is the Wheel Ferry for carrying passengers to the Medical, Reconditioning and Embarkation Centre on the Wheel from whence they will then travel onward to the Moon and planets.

The two large unmanned rockets are used by the BIC for transporting fuel and equipment to the Wheel—the one on the left having crashed in take-off is being reconstructed on the spot.

As a technician Francis G. Rayer has few British equals when it comes to scientific accuracy in his fictional works, however, he shows in the following story how gripping and suspenseful a science fiction plot can become when introducing a simple element like the wind.

STORMHEAD

By Francis G. Rayer

Illustrated by QUINN

Wind sighed under the pink sky, moaning up from the sea and across the miles of open flatland. Sam Walvis turned up his collar against it as he left the sectional hut. A month on Ceres, and the wind had never stopped, he thought. It sang in the hut aerials, rushed across the plain, and piped round the five upthrust, gleaming needles that were their only contact with the solar system and earth.

A hundred yards from the huts was an earth mound. He plodded through the loose dusty soil to it. His own height, criss-crossed with many strange feetmarks, it was hollowed in the centre. He halted on the rim.

"Salutation, Adik Na."

The Ceran curled in the basin depression straightened and rose upon its four rear feet. Caterpillar-like, with four anterior and four posterior limbs, its head rose level with Sam's.

"Greetings, earthman."

The voice was thin. Sam put his thumbs in his leather belt. "You will parley, Adik Na? I speak for my people. We would live in peace."

Adik Na momentarily hooded the two black discs of his eyes. "When darkness has come and gone three times I will parley."

"Very well."

Sam let his gaze stray again to the five ships. They had cleft light years of space and stood balanced on tail fins. They were his responsibility. And, through them, the lives of every earthman on Ceres became his responsibility too. With three-quarters earth

gravity, the planet had promise. There was water, a well-oxygenated atmosphere, but no ores or minerals. At first that had seemed a vital failing. Investigation had proved it was not. The system had a second planet, Tagus, dense and small and locked with Ceres in binary orbit. It was thirty percent solid ore, if calculations were correct.

Wind flapped his coat as he descended the mound. He halted, re-ascended.

"You have bad storms on this planet, Adik Na?" he asked.

Adik Na made a spreading gesture betokening assent. "Very bad. The last bad storm killed many of my tribe."

Sam recalled the only storm since their landing. The weather station had clocked 90 m.p.h. winds. The Cerans had retired into their mounds, burrowing once more to daylight when the storm passed.

"You said nothing of deaths then," he pointed out.

"There were none." The Ceran seemed to follow his line of thought. "The storm was before your coming. Since your coming there has been but slight winds."

"I see."

Sam descended the mound. If 90 m.p.h. was a slight wind, what was a storm? Probably an earth gale meant little to the Cerans. Large as a man, they moved flat and low on leathery stomachs, hairless from rubbing over the ground. Cat-like fur covered their backs. They might plod on against winds no human could face. He hoped the old native leader would speak peace when the day came.

Back at the huts he started a weather truck and rode out to the five rockets. Bunker Flats was smooth sandstone, an ideal site. A hoisting cable descended from a derrick in one ship's port, lowering a cage. Its inmate waved.

Sam Walvis left the truck and waited until the cage bumped to rest. A stocky man of forty, with dry, humorous eyes, stepped out.

"How long before the ships are ready?" Sam asked.

Captain Jim Newlyn looked cautious. "Perhaps two months. All the reactors have been serviced, and some of the tube liners replaced. Every ship is at least two-thirds ready. Why? Expecting to leave early?"

"Not yet." Sam listened to the moan of the wind round the five long, slender hulls. A ship was set down on her stern, blasting against gravity. That was the only position from which she could take off. He eyed them, upthrust against the pink sky. "Think they'd stand a real gale?"

"A 150 m.p.h. side wind, according to data."

"And at above that?"

"They'd go rolling like empty bottles." Newlyn studied him. "You're not suggesting we shall have winds like that——?"

Sam shrugged. A new planet always had unknown factors. So far there had been no danger.

"See the gangs keep right on," he said.

He briefly inspected the five ships, then took the vehicle back across the flats. Head to tail, a score of Cerans were winding slowly among the mounds beyond the sandstone. Other leaders going to consult with Adki Na, he decided. He had never seen so many on the move together.

A thin, lanky man with red hair was waiting. His expression was so patently eager that Sam halted the weather truck and got out. Shilton Judy was the oddity of the group, but made up in brains what he lacked in convention.

" Is a ship ready to cross to Tagus, sir ? "

Sam shook his head. None of the five were ready to blast off. He would not risk a trip even across the few thousand miles to their companion planet.

" Not yet, Judy. Have you finished ? "

" About all I can from here, sir. Spectrum tests, radar soundings. Also density, calculated from size and perturbation of Ceres."

" Good." Sam knew Tagus, minor in the binary, could be important. " Tell me."

" I've got it all on record, sir." Judy jerked his ruddy-maned head at his makeshift laboratory building. " Tagus keeps the same face towards us, like earth's moon. Ceres has a very slow relative rotation—once in 200 years, near as I can calculate. Put another way, Tagus circles Ceres once in two centuries. Meanwhile the two spin in their binary orbit, giving us a day of just over thirty hours."

Sam nodded and removed his gauntlets. It had seemed a long time since dawn. Judy followed him into the hut.

" The Cerans are waking up," he said.

Sam wondered at the note in his voice. " There's a parley with old Adik Na."

" And other things. I took the copter out and I've never seen so much general movement among the Cerans since we came. They're on the move."

Sam let it pass. It was time he went into the radio room for the usual evening check with the camps remote from base. Furthermore, scientific and sociological problems were Shilton Judy's pigeon. Responsibility for the five ships on Bunker Flats was enough for one pair of shoulders.

The distant camps were based on weather trucks that had spidered out slowly from the hut base. Each truck held three men, was self contained, and good for an out and back trip of two thousand miles without refuelling. Systematically he contacted each and heard them out. The last was to the west. The report terminated with wind

velocity readings that made Sam's brows rise. He studied the map, where a pin showed the truck's position.

"55 m.p.h. and rising," he said. "Check that."

"No error." The radio seemed to have a background whistle. Listening, Sam knew it was wind—a gale howling round a metal truck over seven hundred miles away. "Bearing 2 degrees off West."

"Thanks." His fingers poised on the switch. "If anything arises drop the regular report schedule and report at once, as arranged."

"Aye, sir."

Sam stood in thought. Peters had been at sea once and perhaps wind meant less to him than to a landsman born and working always in sheltering cities. Five tall ships stood balanced on slender fins on Bunker Flats, too.

"On second thoughts, report every hour," Sam ordered.

"Aye, sir."

He heard Peters silence the transmitter. Shilton Judy had placed an outline report on the table that served as desk and Sam took it up. Covering Tagus, it confirmed what Judy had said. Sam frowned at the last line only. "Spectrum tests show the presence of some atmosphere, fairly high in oxygen content." *Oxygen*, Sam thought. Odd, when Tagus was manifestly naked rock and ore! He wondered if Judy had slipped, there.

An hour passed. Outside, a high wind swept across Bunker Flats, bringing a spicy smell like nutmeg and juniper. Sam sniffed with apprehension. Hundreds of miles away to the west were forests of aromatic trees. Only once before had their fragrance come so far. And within six hours the 90 m.p.h. gale had been howling over the flats.

He rode across to the five ships and found Jim Newlyn standing with his back to one wide pedestal fin. Wind tugged at Newlyn's jerkin coat and flapped his trousers tight round his legs. His face had the carven appearance of old oak. His light eyes were set to the west and his nostrils twitched visibly.

"Don't like that, Captain Walvis," he said.

Sam looked up at the towering pinnacle of steel. "Nor I." He wished the designers had given a bigger tail-spread to increase the ship's base area. Newlyn followed his glance.

"Only other time I smelt the spice forest was before the last storm, Sam," he said.

Sam lowered his eyes to the other's. When Newlyn used his first name he was being unofficial and had something to say as friend to friend. Sam nodded.

"That's the only other time I smelt it, Jim."

Newlyn put a hand on the thick edge of the rocket fin. "I'd like to put guy cables from high up top out as far as we can. We could splice a cable round up for'ard and take the guys out to anchors a hundred yards from the ship's base. It should help."

"It might."

He watched Newlyn go. He doubted if cables would help much if wind pressure on the hulls grew too strong. A tumbled ship was a lost ship. No power on Ceres could right them if such a disaster arose. As well might ants try to right a child's tumbled skittles.

He went back to the huts, wondering what Peters would report. The scheduled radio contact with his own immediate superior was also nearly due. Major Fohn never used christian names. His cruiser would be on Ceres within the week.

The Cerans were still on the move traversing the rim of the flats with a wobbling, humping movement. Sam noted they had divided into two streams, and only one kept to the near side of the flats, where old Adik Na had lain.

He looked into the laboratory hut. Shilton Judy sat at a bench.

"Like a little local field investigation for a change?" Sam asked.

Judy put on his spectacles. "Can do."

"I'd like you to find where the Cerans are going, and why. Keep an eye on Adik Na. He's the only one can parley with us and act as intermediary. If the Cerans object to our presence they may be more dangerous than we think."

Judy put on a coat and hood. Sam noted he put dust goggles in a pocket. He remembered the report.

"There is oxygen on Tagus, Mr. Judy?"

"There is, sir." Judy drew up the hood. "The spectrum test is quite conclusive."

"But there's no vegetation there!"

"None, sir, nor any form of apparent life."

Sam looked at the wall clock and saw it was nearly time for the Major's call. He stopped with a hand on the door.

"Then how do you account for the oxygen?"

"I can't, sir."

Judy left with him, coat zipped tight, and struck off along the edge of the flats, bent against the wind. Somewhere in the building a loose partition grumbled repetitively and Sam realised the wind had increased. It snatched at his garments, buffetted his face, and sang like a harp under the pink sky.

Peters was just coming through from the weather truck. Excitement edged his voice.

" This is some wind, sir—110m.p.h. and rising !"

A muffled, boisterous piping was background to his words. The wind seeking round the hut so far lacked its keen whine.

" I see," Sam said. " How do things look ?"

" Bad, sir. This is a special storm, right enough ! We're exposed here. Got high to examine the area. Dead west is what we think must be a cyclone. It looks ten to fifteen miles distant. It's *big* !"

" Try to map its path and report regularly."

Sam turned the switch to stand-by as the bulb on the space radio glowed red. Major Fohn did not like waiting, either.

" Ceres H.Q. here."

" Command cruiser here. Contacted and over."

" Am receiving you."

There was a delay, then a clipped, military voice replaced the radioman's. " Major Fohn contacting."

" Captain Walvis here, sir." Sam listened to the piping of the wind round the building. Steel, based in concrete, it would stand. He wished his confidence extended to the five ships.

" Good. We are now in corrected orbit and can supply time of landing."

" Yes, sir." Somewhere outside loose equipment fell with a clatter. Sam hesitated. " We anticipate a storm. Will you delay a definite landing schedule until you have our O.K.?"

Silence, then: " If you recommend, Captain. Our present orbit gives touch-down in five days. We will maintain it provisionally."

" Very well, sir."

" Meanwhile, safeguard your ships and the Ceran leader. He is important." A pause. " What is that noise ?"

" *The wind*, sir !" Sam felt glad the sound had got over the space radio.

If Fohn was impressed, he did not betray it. The radioman's voice returned.

" Command cruiser over and listening out."

" Out," Sam said automatically, and opened the switch. He thought uneasily of the wind, undeniably rising. Better see how Newlyn was getting on, and warn him.

Wind dragged the door from his grasp, keening viciously round the building. He heaved it shut, almost lost balance, and ran to the weather truck. Gusts tore round it and he closed all the ventilator flaps. Something Fohn had not said remained in his mind. This would make or break his career in the service. No excuse would help if the ships toppled.

Men worked furiously, bent against the wind. Cables, each anchored in several places to the sandstone, were being hoisted up the silver hulls. They quivered vibrantly as longest strings of a giant harp.

Newlyn battled through the wind to the vehicle, entered, and let a gust slam the door.

" Looks worse than I thought !" he said.

The truck shook under a squall. Sam listened to the eddying thunder outside.

" Worse still is on the way, Jim. The cables won't hold if it gets too strong."

" They won't," Newlyn admitted. " They're too few and too small."

" I wish the ships could be taken up—they'd be safe then !"

Wind thrummed on the vehicles. Jim Newlyn shook his head. " That would be suicide, with the tubes not serviced !"

" I know," Sam said flatly. A light blinked on the dash—indication that someone back in the radio shack was trying to contact him. He turned down the switch.

" Is that Captain Walvis ?"

He recognised the urgent voice of one of the radio watch men, just returned to duty.

" Yes, Smithson."

" I saw you drive out, sir. Peters from the western survey point is calling you—"

" Put him through !"

Silence, then the relay brought Peter's voice. " Wind is clocking 150 m.p.h. and rising, sir." There was panic audible above the background howl. " The cyclone is growing and near. Its path is dead from the west. It's several miles across—"

" Sit tight !" Sam wondered if the cyclone would die before it struck Bunker Flats.

" I doubt if we can, sir !"

" *What* ?" Each truck contained upwards of ten tons of gear, and was strong as a tank. " *Why not* ?"

" The wind, sir. Squalls are topping 180 m.p.h. We can't promise to maintain contact."

Peters was shouting. Behind the voice howled and piped such a bedlam as crisped Sam's scalp. He realised he had been shouting too, both to overcome that din and the roar outside.

" It's shaken the truck badly, sir—"

" Then withdraw to shelter !" Sam half bellowed.

" We can't, sir. A gust lifted us and smashed an axle. It's bad, sir—we—"

The voice ended. A scrape as of steel on rock, then radio silence. The carrier had gone from the band. Sam looked at Newlyn. His face was set and white.

" Some wind to turn over a weather truck, Sam," Newlyn said.

His gaze went up to the five ships. Sam guessed his thoughts. No guying possible would hold such tall pinnacles of steel upright against gusts like that.

Newlyn grasped the door. " I'll be going back—"

" Keep radio watch from all ships."

" We will, Captain."

The door banged open and shut, steel ringing. Newlyn staggered bent double. Men were abandoning the half fixed guy ropes, unable to stand. Unchecked wind raced across the flats, striking the ships like giant fists pounding a gong. The truck vibrated and Sam saw fragmented leaves racing past the curved window. The smell of juniper and nutmeg was very strong.

He swept in a curve for the huts. At the edge of the flats Shilton Judy was battling against winds that threatened to send him cart-wheeling. Sam slowed, and saw that a Ceran was following Judy, stomach on the earth and black hair smoothed sleek as silk. Sam jerked open the door. It banged the truck's side, rebounding with a clang. Wind screamed into the vehicle, carrying a debris of torn leaves. No scented tree grew nearer than a hundred miles. The blizzard of fragments suggested the forest itself was being stripped. Judy almost fell inside, followed by the Ceran, who mounted as a caterpillar would. With both hands Judy closed the door, panting. He jerked his head at his companion.

" Most of them are retiring to caves a mile or more from here."

" It is always so with those tribes at the time of the storm," the Ceran said.

Sam realised it was not Adik Na, but a smaller, ancient native. His voice had the same whispery sibilance. Wind shook the truck.

" I did not know others of you spoke our tongue," Sam said.

The Ceran made a spreading gesture showing assent. " We have—ways. It is not difficult."

The howling gusts rose and fell. " You expected such a storm ?" Sam asked, astonished.

The large disc eyes were momentarily hooded. " Legend tells that it is always so. I and all other old ones have seen such storms and know. It is a tidal movement of the atmosphere, and arises each two hundred years—"

" The rotation of Tagus round this planet !" Judy put it.

" As you say. Only once in such a period are our sun and secondary planet so positioned as to cause so great a movement of atmosphere."

Sam thought of tidal waves on earth, where seas rose scores of feet. How much greater would be the movement of air, with Tagus so near ! He looked up through the curved window. As always, the slight pinky tint of the miles of atmosphere above hid the position of the smaller binary.

The Ceran turned his disc eyes upon the five ships. " They will fall—"

" There are guy wires," Sam pointed out.

The Ceran took up a fibre of torn leaf in its nippers and pulled. The fibre snapped. " Thus when the wind comes."

" The caves are to the south," Judy stated. " The general exodus wasn't to Adik Na's parley at all."

" No caves are found elsewhere." The shiny black eyes watched them both. " We need protection when the storm comes. Your ships will fall, earthmen."

He slid from the seat, opened the door with two limbs, and descended to the earth. Sam watched him move away, stomach brushing the ground. Stronger winds screamed round the truck, whipping up dust that obscured the view. Thin twigs raced on the storm, pattering on the window. The wind itself seemed to push the vehicle's flank like a great soft beast, shouldering the steel so that she rocked on her springs. An anemometer handle was near the driving seat. He slid it up. The wind gauge showed 110 m.p.h.

Five beautiful silver skittles, he thought. Five beautiful silver pieces of junk lying on Bunker Flats. Mildly dented, perhaps, slightly scratched. But utterly useless. A spaceship could only take off vertically, and men were not giants.

He tried the radio, and found Jim Newlyn was setting up contact with the H.Q. radio shack. The anemometer showed 115 m.p.h. and the wind had a new, high, piping undertone.

" Captain Sam Walvis here." He thought of Jim perched high in his ship. If one silver skittle should accidentally fall . . .

" Newlyn here," the radio said. " We've abandoned work. It became impossible. The wind—"

" I know," Sam agreed. " Can you have all ships prepare for blast off ?"

" Blast off ! It would be suicide, Captain ! The liners aren't replaced. You know what happens if a liner goes when a ship's rising. Blast off wasn't scheduled for over two months—"

" We haven't got two months." *Suicide*, Sam thought bitterly. It was suicide to let them remain there, if the wind topped the stability figure.

" I won't be responsible for what happens." Newlyn's voice had an edge to it. " There's not one of these ships will live the attempt."

Sam listened to the piping fury outside. " The responsibility is mine. All ships prepare."

" If it's an order."

" It is."

" Very well, Captain." Wind pummelled the truck. " And—Sam—there's not one of these ships will reach space. The liners won't take it !"

The radio went silent. Sam's gaze rested on the five ships, away across the flats beyond the hurricane of leaves. He bit a lip. As Jim said, the rocket tube liners wouldn't take it.

Wind velocity increased steadily the next hour. Gusts were topping 140 m.p.h. and three of the ships stood ready under skeleton crews. In the other two electricians strove to make complete firing circuits that had been left disconnected pending the completion of re-fitting. The hail of leaves had thickened, then ceased. The forest was stripped. The hut rang like a tin box thumped on the outside. Far away on Bunker Flats the five tall ships seemed to sway. Sam contacted each in turn. Three were to stand by for take off. The remaining two were to report when the propulsion units were ready for firing. He felt very tired. Rotten luck, he thought. He had been anticipating a crown to replace his three shoulder pips. The only crown on Ceres would be Major Fohn's. There would be no Major Walvis—only investigation, court-martial, ignominious discharge.

He contacted a weather truck south east of Peters's position and instructed it to move north and report regularly. Within half an hour it reported sight of the cyclonic stormhead, still moving directly east. Sam felt the five ships were doomed.

" Avoid exposed ground. Try to get readings of actual cyclone velocities. When conditions permit search for Peters."

Field, in Truck 9, was reliant. His figures would condemn or reprieve the five ships.

The door opened to a flurry of wind and slammed, again muting the fierce piping. Shilton Judy, flustered and hatless, pressed his back to the panels as if to prevent them being pushed inwards.

" Some of the natives are moving east," he said, shoulders rising. " There are no caves that way. It's blank ground."

Sam groaned. " Are they to be my responsibility too ?"

" Old Adik Na is— and he's among them !"

Difficulty on difficulty, Sam thought. The old Ceran must not die.

The radio indicator glowed. He closed the switch. " H.Q. through."

" This is Truck 9."

Sam noted the excitement in a voice that was usually calm and factual. " Go ahead, Field."

" The storm should hit Bunker Flats in under three hours."

" You've not mistaken the direction or velocity ?"

" No, sir." Field was shouting above the hammer of wind on the truck. " We're lying in a cleft near the perimeter of the cyclone. The average periphery wind speed is 250 m.p.h. and rising. Gusts top 300 m.p.h." A violent drumming made his words momentarily inaudible. " The scented forest is stripped. The trees themselves are going, uprooted—"

A howling blast shook the cabin so that Sam lost the rest. He remembered the trees, observed from a copter, vast, stout, oaklike in strength. *Three hours* !

" Keep reporting," he ordered.

He met Judy's gaze. " I'm going out after Adik Na. You'll come to show me. Smithson can stand by here and relay to the truck."

The wind was a solid wall of pressure upon their bodies. Sam gasped under its force, breath driven from his lungs. Here by the huts gusts were reaching 150 m.p.h. He ached at the thought of the five tall ships.

The truck quivered like a coracle under the impact of wind-driven seas. Shilton Judy was pale.

" That way," he said.

Driving with one hand, Sam put on the radio equipment. A hundred fists pounded the truck and he stepped up volume. The relay from Truck 9 fluttered with the dancing aerial. " The wind is rolling boulders along the flat," Field was saying. The howl of wind around his truck had a sharper, higher tone, screaming, piping. "Gusts topping 320," he said.

" Keep reporting !"

" Yes, sir."

Sam took the shivering truck on along the rim of the flats. Adik Na and his companions had apparently moved with unusual speed, trailing head to tail into a wilderness offering no shelter, he thought uneasily. The whole affair seemed very like a major disaster for the complete outfit, and Captain Sam Walvis in particular.

Wind struck the truck with new vigour. " They've gone a long way !" Judy yelled.

His gesticulating arm took in the barren, undulating terrain beyond a deep cleft. Sam saw it meant a long detour. The Cerans had negotiated the sharp depression, might even have followed it before climbing to its exposed far rim. But the truck could not. To try would be suicide.

He turned dead into the wind, engine whining. Major Fohn had ordered Adik Na be saved. Even without that order Sam would not have let him and his companions die.

He adjusted the radio. The power was sufficient for direct local working and Captain Jim Newlyn might have been waiting his call. Sam held the mike near his lips, shouting.

"You all ready for blast-off?"

"We are." A humming organ note backed Newlyn's words. That, and the background of wind, did not drown the overtone of emotion.

"Wait my order!" Sam yelled.

"We will. But with the tubes as they are you know what the result will be!"

Still following the cleft, Sam felt for words. If the ships blasted off, one or two might survive. The trajectory of the rest would be spectacular—but unpleasant. Yet if all stood grounded, all would fall. And a toppled ship was scrap for ever. Worse, to a spaceman ships meant life. Heroes uncounted had given their lives that their ships might be saved, knowing that on those ships many comrades' lives depended. He licked his lips.

"Stand by for signal, Jim."

"Aye." The radio brought the sound of the wind round the tall ships.

"The skeleton crews are ready?"

"All volunteers, sir."

"Good. And the best of luck!"

Sam felt there was nothing further to say. Duty would compel he give the order. The men who would obey would know their duty too. As he broke truck-to-ship communication the radio shack came over above the piping wind.

"Major Fohn in the command cruiser is wanting you."

"Relay him through."

The Major's voice was weak against the gusts pummelling the truck. "I have been in contact with earth. It seems Ceres is more important than we thought. She will be a step outwards to other systems. But we must build on peace—"

Sam listened as the voice droned on. Fohn was obviously repeating instructions from a higher authority. Continued occupation by men could only be based on peace, so negotiation with the Cerans was vital.

Adik Na was the only leader who had shown any inclination to negotiate, and he must thus be protected second only to the five ships, which were to carry men on to further systems. As the truck lurched down a slope amid flying sand Sam groaned. Adik Na and his followers seemed bent on self-destruction miles from cover in the cyclone's path. The next two hours or less would show. He heard Fohn out and returned his attention to the search. From here Judy did not know which way the Cerans had gone. Drab coloured, moving low on their stomachs, they would be difficult to spot.

The truck gained a rocky hump and shook as if struck by a giant hand. Judy blanched. He raised a gloved hand and shouted something above the hammering wind.

Away to the west a swirling funnel stretched from earth to sky, its attenuated middle writhing and swaying. Still many miles distant, it rose above them like a huge pillar, its flattened base sucking over the ground, its top lost amid tumbling cloud. Never had Sam seen anything one tenth as awesome. From it, carried even above the howling wind, came a bugling rumble, vast and thunderous. Around its giant rim flew debris from the forest, a scurrying, swirling cloud stretching miles high into the heavens. Aghast, he tore his gaze away and thumbed the switch.

" Radio hut here."

The tone told Sam the operator had seen the terrible spout. He raised the microphone to his lips bellowing above the thrumming wind. " Check the cyclone bearing and speed, and keep reporting to me."

He left the set on. Very remote beyond a thin screen of flying sand a long, humpy rope seemed to be dragging itself away into the distance. He jerked the truck into motion, wondering what queer error or instinct was taking Adik Na and his followers away into bare regions giving insufficient protection for a rat.

" Hut here," the radio said. " Field in Truck 9 has been reporting. They lay in a cleft. Periphery gusts have been topping 350 m.p.h. Their instruments don't record above that. The cyclone path is unchanged and dead east. Its foot is two to three miles in diameter. From his readings and ours, it will pass directly across us here, and across Bunker Flats." The element of panic was stronger in the voice now.

" If you think the huts won't stand it, get a truck."

" Yes, sir." The voice sounded relieved.

Sam watched his anemometer dial. Gusts were exceeding the safe stability level of the five ships. He switched to Newlyn's band.

" Still standing by to fire ?"

" Still standing by."

Newlyn's tone said that he would fire when instructed, but considered it suicide. Sam wondered if it was right to risk men's lives on the chance of saving some of the ships. If the ships toppled they would be bruised but alive. When tubes blew the crews were not merely bruised, but shattered—and dead. Against that was his duty to take any chance to save the ships, which were in their turn indispensable to Ceres and a score of other planets scattered half across the Milky Way.

" We're rocking," Newlyn said. A taut wailing backed his words.

" Let me know when you judge you've reached the limit."

" I will, Captain."

The tone implied the limit was not far away. The truck bumped down a declivity and ascended to higher ground. Adik Na and his companions had camped in a circle on bare rock.

" They're bent on mass suicide !" Judy growled.

As Sam drove through the howling wind he wondered why so few of the Cerans had attempted communication with the earthmen. Half a dozen ancients alone had spoken with him, and of those Adik Na was the only one to see an earthman's viewpoint. The others were hostile, or completely indifferent, like the young Cerans who went about their own affairs as if the earthmen scarcely existed.

The truck crossed the naked plain, hammered by fierce gusts. The Cerans lifted their heads. One came towards the truck, and Sam recognised Adik Na with relief. He slewed the vehicle so that one door was to leeward, opened it, and braced himself in the opening.

" Adik Na !" he roared.

The words were lost in the wind, but the old Ceran appeared to understand, and came on. Several paces from the truck he halted, flattened close against the rock.

" You come to try to save us."

The whispery words were as if spoken in Sam's ear, clear as if breathed against a background of silence. Abruptly he knew the truth. It explained why there had been no apparent period of learning. The old Ceran employed telepathy of a high order . . .

" That is so." The whisper was in Sam's head. " It is a power that only comes after hundreds of years. That is why our young pass you in silence."

Sam's wonder died in the face of the greater emergency. " You shouldn't be exposed ! You'll be wiped out. Other Cerans have gone to the caves south."

He halted as the radio sprang to life. " This is Newlyn. We haven't much longer. I can't promise the next gust won't have us over—"

His voice faded in a momentary fiendish howling. The cyclone was bigger, more awesome, striding in a wavering column towards the ship site. Sam dragged his gaze from it, back to Adik Na.

" Get into the truck ! Bring as many of your companions as can enter—*quick* !"

The old Ceran braced his legs upon the rock and lifted his head, scanning the cyclone. " It is thus every two hundred years," he murmured. " It is a vast tidal wave of the atmosphere. Tagus, as you name our second planet, is very near. In two hundred years Tagus, sun, and our rotation all reach this critical point . . . it was so in my youth."

" Even so—but jump in !" Wind curled round the truck and almost plucked Sam out of the door. " I may have time for two trips to the caves—"

Adik Na made the odd gesture which showed agreement. " You would risk that much to save us. You come with kindness in your minds. It is good."

" Not when we're left with five wrecks !" Sam snapped. Irritation rose momentarily in him. " I should be on one of those ships, doing what I can !"

Jim Newlyn's voice cut across him. " Do we blast ? If not we're done—"

Sam shot a glance at the cyclone. Humming like a hammered drum, it was near. Eddies from its forefront caught them, changing the wind direction fitfully. The truck door smashed back against the vehicle's side. Something broke and the truck shivered. *They must blast*, Sam thought. It was the only chance of saving even a single ship of the five.

His lips opened. " Prepare—"

Then something seemed to cut into his mind. For a brilliant moment contact such as he had never known came. He stood with Adik Na facing the wind, experienced with him the memories of two hundred years. In an instant it all fitted. *Kindness for kindness*, Adik Na murmured. Then the contact was gone, but the knowledge remained.

He licked his lips. *Prepare to fire* ! Never ! " Prepare to leave ships," he said.

Judy gripped his arm. " They'll never stand ! Half this cyclone would topple them !"

" It would—if it struck," Sam said. Relief surged through him, twofold and sweet. Thankfulness that he had come to save Adik Na was first, with extreme gratitude that the old Ceran had halted the order which would have almost certainly sent the ships to destruction.

He pressed the radio control again, to make doubly sure. "Stay grounded, Jim."

"I will."

"The path of the storm is always the same, every two hundred years." Sam dragged shut the door so that the humming wind was quietened. "Some Ceran tribes shelter. Others come here, as Adik Na and his forebears before him. It's not suicide, but wisdom." He slewed in the seat. "You found oxygen on Tagus, Mr. Judy. I thought that was an error."

"It wasn't—"

"I know." Sam pointed at the cyclone. "That's where *she* goes!"

A shrill piping drowned his words. The metal panels of the truck vibrated. Twigs rained around them and the swaying foot of the huge, weaving pillar swept like an express train at them—and rose. Up, up, cloud-like, screaming away higher and higher up over the plain, over the five ships, away up into the turbulent sky.

"Tagus is near," Sam breathed in the sudden stillness. "Ceres loses that much of her atmosphere to her companion's gravitational pull every two centuries."

The humming was fading, organ-like, receding. Swirling clouds closed round the foot of the pillar. Below, abrupt calm had settled over the plain. Sam looked at the anemometer and saw it was registering an even 45 m.p.h. The storm had funnelled away up to the binary, as it always did.

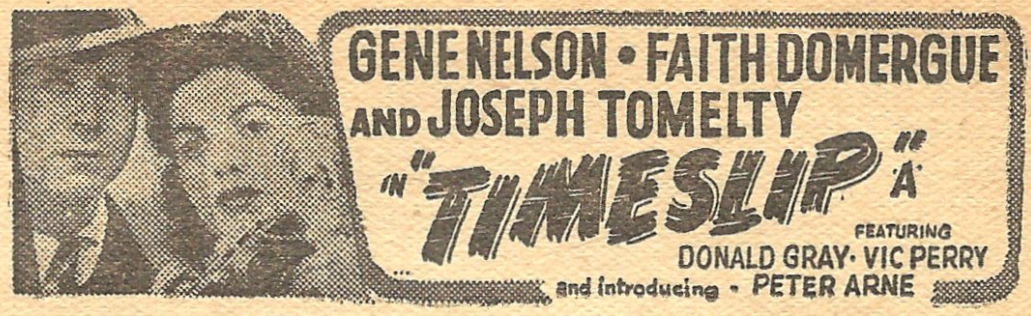
"Thanks, Adik Na," he said.

Adik Na rose upon his posterior feet, his head level with the weather truck window.

"Return to your ships. I will come later, to parley."

Sam nodded and turned the truck. The wind was at about its usual level, for Ceres, and sang quietly across the flats, where the five ships glinted. A descent cage was creeping down the side of one. Driving with one hand he rubbed his shoulder where the door had bruised it. A gold crown would look rather well there, he thought. *Major* Walvis sounded good, too.

Francis G. Rayer



With the advent of films like *Destination Moon*, *When Worlds Collide* and *Conquest of Space* most science fiction readers imagined that we were in for a succession of spectacular movies which would not only do justice to this particular facet of literature but also widely interest the general public. However, the Hollywood approach to such film stories, particularly in the " B " features, has been a rather vain attempt at putting a human interest theme into the mechanics of space travel, in most cases with disastrous results—the audience laughing in all the wrong places ! With the result that in the cinema science fiction has quickly been placed in the same category as comic books—at the bottom of the social scale of entertainment.

It seems to me that the film approach to this exciting medium should be the same as that used by the book publishers now entering the field—an overall general interest story with a subjective science fiction theme being employed throughout, which neither stretches the imagination too far nor becomes incredibly laughed at. That this approach is not only possible but can be done successfully is evident in Merton Park Studios' thriller *Timeslip* starring Gene Nelson, Faith Domergue and Joseph Tomelty, which Anglo Amalgamated will be distributing throughout the ABC circuit shortly after a World Premier in Brussels.

This film is doubly welcome because it is a British effort with the script written by one of our own regular science fiction writers—Charles Eric Maine. Televiewers will probably recognise the title from a thirty minute BBC play they saw last year, but apart from that and the central theme (a man whose brain is seven and a half seconds in advance of *present* Time) there is little similarity between play and film. Not only is it a first-rate production but it is also the type of story that will be readily acceptable to most cinema audiences who will absorb without query the brief science fiction elements without realising the fact.

In company with the author I watched some of the scenes being filmed at the studios earlier this year and it was evident from the unconnected fragments we saw in April that the story was going to be a fast-paced one full of action and drama. During the midday break

we lunched with Joseph Tomelty, who plays the part of a police inspector, and watched Gene Nelson and Carl Jaffé play snooker surrounded by technicians offering the usual good advice, and afterwards watched the latter acting as " Dr. Marks " explaining by simple analogy the " sugar coated " scientific part of the film which referred to Dunne's Relativity of Time.

In this film Gene Nelson, celebrated as a Hollywood dancing star, achieves his ambition of acting in a straight dramatic role as ' Mike Delaney ', science reporter for *View Magazine*, and does extremely well as the thoughtful but tough amateur detective intrigued by the similarity between an unknown man fished out of the river with two bullets in his back and nuclear physicist Stephen Raynor (played by Peter Arne). Ably abetted by Faith Domergue (whose third film this is with a science fiction flavour), playing the part of ' Jill Friday ' a staff photographer on the magazine, they become involved in a series of clues which at first lead nowhere. Delaney and Inspector Cleary interrogate Raynor at the Brant Institute where he is working on atomic transmutations but he points out that there cannot be any connection between himself and the wounded man in hospital. Meanwhile the unknown has been operated upon and near its conclusion his heart stops beating for some seconds before he revives.

Other puzzling features begin to unfold—photographs show that the wounded man is apparently surrounded by a halo of light—X-rays of his head are completely fogged—instruments in the hospital show acute radiation wherever he is—and when finally conscious his answers to questions are at first incoherent. However, Delaney, Jill and Dr. Preston (Martin Wyldeck) discover by means of a tape recorder that he is actually answering the questions *before* they are asked.

I do not propose revealing any more of the plot, which never flags for a moment, as this is being written at a time when the release date of the film is not known. However, it is worth mentioning that many popular and well-known people appear in the supporting cast—BBC television announcer Donald Gray plays the part of Maitland, head of the Brant Institute ; Vic Perry, internationally known for his variety-stage sleight of hand and film and television programmes in USA, has a particularly sinister part as Vasquo, a South American ; Launce Maraschal as editor of *View Magazine* ; and a pleasant surprise in recognising actress Pat Driscoll (who was so popular in the BBC's children's programme " Whirligig ") as a technician in the Brant Institute.

If *Timeslip* is the shape of films to come—let us have many more like it (other film companies please note !)

John Carnell

The following story which author Barclay has fitted against the pattern of his Jacko invasion of the Solar System is actually a side-issue to his main theme—however it does point up how present-day naval procedure may well be carried into space at some future time.

ROCK 83

By Alan Barclay

Illustrated by HUNTER

Meet the *Tadpole.* The proper name for the *Tadpole* is U.N.S.N.D.3—United Nations Space Navy Destroyer 3—and it was the third of the so-called Destroyer class of ships to be constructed by the United Nations after the mystery of the Jacko D-Ray had been solved.

To say that this particular problem was solved is being optimistic, for all that humanity did was get hold of a Jacko ship which had not been completely destroyed and find in it an almost undamaged D-Ray installation. Humanity then proceeded to develop a D-Ray emitter with five times the lethal range of the Jacko affair, despite the fact that nobody really got round to understanding its principles.

The D-Ray has one serious disadvantage when compared with conventional human weapons; in addition to emitting the D-Ray in the desired direction, it discharges a back-lash of hard radiation. Since the Jacko fighter-pilot must sit with his D-Ray emitter in his lap (always supposing he has a lap), some people think Jackoes must actually be partial to hard radiation. Others maintain that pilots of Jacko scout-ships rarely live to enjoy their old age pensions.

At any rate a very few doses of this hard radiation would be fatal to human crews, so a ship was designed large enough to carry a pair of D-Ray emitters mounted outboard on tripods. The ships were ovoid in shape and had these outriggers sticking out to port and starboard, each with a five-foot diameter ball on its end. They needed a whole heap of motor to drive them and ate fuel at such a rate that they raised an entirely new set of fuel supply problems. They carried a crew of seven. The Captain and Navigator were officers; there was the gunnery N.C.O. (although there were no guns of the orthodox sort aboard); Signals Op., Engine Artificer, two gun-layers, and a general rating who did everything from making coffee to going on the outside occasionally to clear jammed equipment.

Despite its comic appearance the Destroyer Class ship was at that time the most deadly thing in space.

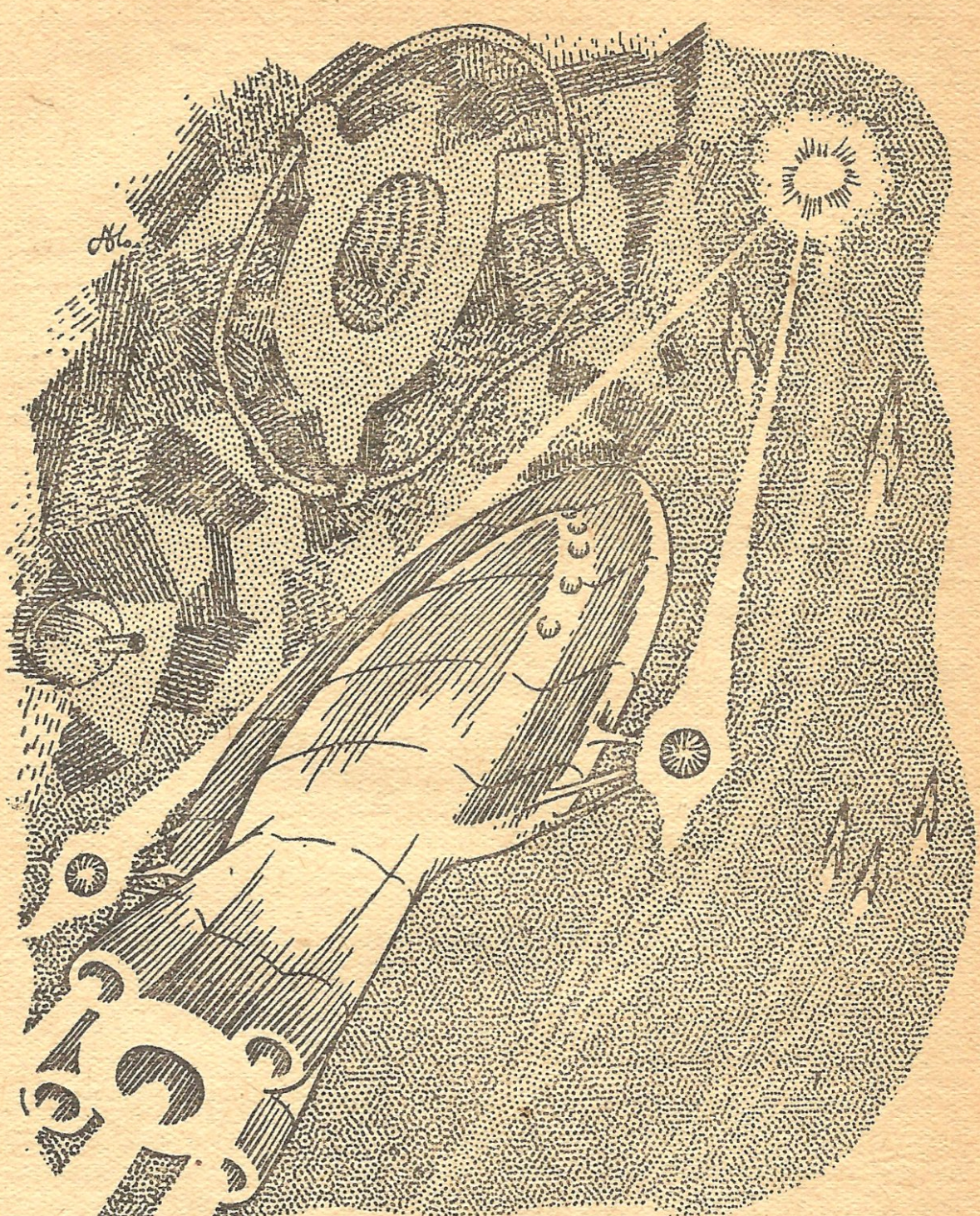
U.N.S.N.D.3 was never called anything but *Tadpole* by her crew, who reviled her and cursed her and abused her with a consuming affection.

The skipper of the *Tadpole* was an Englishman called Sloane. His crew said he was a reasonable sort of an officer, although they worried a good deal about his sense of duty, which was rather highly developed.

The Navigating Officer and second-in-command, a young, fair, handsome but by no means innocent lad of twenty-two, was one of the best navigators in the service.

The real ruler and manager of the ship was the gunnery N.C.O. His name was Jethro. Not Jethro something, or something Jethro; just Jethro. Captain Sloane had once written about Jethro: "This N.C.O. has outstanding ability to obtain instant and willing obedience from his superiors."

Everyone agreed Jethro should have held Admiral or Field-Marshall rank; probably the only reason he did not was the fact that he had first seen the light of day in some unpronounceable mining settlement out on Mars and had never learned to read or write. Many people agreed with Jethro that in this age of film-strips and tape-recordings, the written word was obsolete, but



among those dissenting were Their Lordships of the United Nations Space Navy Commission. So Jethro was obliged to manage the space war as well as he could from the rank of Gunnery N.C.O.

After a series of navigational miracles performed in a very matter of fact way by the Navigating Officer, *Tadpole* drew up alongside Rock 83, nose jets flaring to kill velocity.

"Bang on the nose," the navigator remarked modestly, hoping for a word of praise from someone.

"Nice case of compensating errors, sir," Jethro told him woodenly.

"Some day that big mouth will get you in real trouble, Sergeant."

"Stop bickering and get on with the war," Captain Sloane interrupted placidly. Then into the intercom.: "Maxwell—signal the Commander of the Rock. Tell him who we are and say that I have been instructed in view of heavy anticipated Jacko attacks that Fuel Supply-base Rock 83 is to be abandoned and destroyed. I am detailed to assist in evacuation of personnel and equipment and to provide escort back to Mars."

Rock 83 lay about ten miles over to port. It was an irregular lump of glittering quartz, exhibiting characteristic crystalline outlines and cleavage planes. With the binoculars, gun turrets could quite easily be seen tucked into fissures and crannies in the surface.

"I wonder what the C.O.'s like," the Navigating Officer speculated. "Senior-Captain is very large potatoes for commandant of a fuel dump."

The intercom clicked. "Message for Captain, sir. As follows: Captain Frobisher commanding Rock 83 presents his compliments to Captain of U.N.S.N.D.3 and requests the honour of his company to dinner, accompanied by members of crew. Dinner at two hundred hours standard." The Radio Op chanted out this piece of palaver with relish.

"Well, bless my jets and radial orifices!" the Navigator exclaimed in amazement. "Requests the honour of the company..."

"The old bird's just woke up," Jethro suggested rudely. "He's bin dreaming he's Nelson getting ready to fight the battle of Trafalgar."

"My own inclinations are to get on with the war as rapidly as possible," Captain Sloane remarked, "but he's senior and I must try to get along with him. Let's hope we can discuss the evacuation plans at dinner." He leaned forward, "Maxwell, accept that invitation. Say the Captain and two others will attend . . . Jimmy, you'll come . . . and you too, Sergeant."

"Wot!" Jethro exclaimed indignantly. "Pig it with a lot of ruddy officers! Not me! I got me pride!"

Nobody bothered to answer; they knew he would come.

A short time later the Captain, the Navigator and Jethro fired their suit rockets and propelled themselves gently over to the Rock. The entrance lock was an enormous and complex construction, by which stores and equipment could be taken down into the bowels of the rock, but there was a small personnel entrance at one side, cut into a crevice, between two gigantic crystal faces.

Unseen operators worked the lock in response to their signals. They passed into a small entrance chamber. From every direction hands were extended expertly to help them out of their suits. In a moment their empty suits were fastened to the walls and their helpers were attempting as far as possible in no-gravity conditions to stand to attention. All except one who, fixed to the floor by magnetic shoes, was dishing out a snappy salute.

"Welcome aboard, sir," said this person.

The visitors looked around them in amazement. Captain Sloane, a good-mannered and civil man, managed to say "Thank-you, Lieutenant." The Navigator merely gaped.

It remained for Jethro to produce a set of words fitting for the occasion.

"Well, I'll be the illegitimate son of the illegitimate son of a speckled bull-frog!" he exclaimed. "Powlags!"

The reception committee, including the member wearing Lieutenant rank badges were Martian natives.

The Powlags were not discovered until humanity had been on Mars for some years, and after the first tremendous excitement of their discovery died down, they proved to be something of a disappointment. They had no technology, no philosophy and apparently no vices. Indeed, their species seemed to have evolved up to a certain point, then to have remained static. They were peaceable, timid, and unbelligerent, hence Jethro's surprise at finding them out here in space.

"Are there many Powlags here?" the Captain enquired.

"The personnel of the Rock consists entirely of Martians, sir," the little officer replied slowly, "except, of course, Captain Frobisher. A number of us have volunteered for service after the Jacko raids on Mars. We were sent here to get experience of space under Captain Frobisher. He is an officer of great understanding and discretion. He has attempted to turn us into efficient disciplined fighting men." The Powlag said this in almost worshipful tones. He then added: "I am instructed to escort you to Captain Frobisher's cabin, sir."

The Powlag led the way out of the little room into the main corridor, a passageway thirty feet in diameter. He and his men

managed to shove off and float themselves along in orderly formation, but the three from the *Tadpole,* not so expert in non-gravity manoeuvres followed in more ragged order.

"It looks like this Captain Frobisher's something out of the ordinary," the Navigator remarked. "This Powlag set-up explains his Senior-Captain rank. I expect he's had special experience of Powlags; probably he's Martian-born."

"Don't omit the formalities, by the way," Captain Sloane warned them. "There seems to be a very old-fashioned high-level standard of discipline laid on here. Lots of saluting. Lots of standing to attention."

"Like something in a film," the navigator commented. It grew more and more like a film every moment. Captain Frobisher received him in his cabin. He was actually seated in an ordinary chair behind a desk. He unbuckled a webbing strap and clumped towards them, magnetic-soled boots clicking.

"Welcome aboard, Captain," he said shaking hands. "And you also, Lieutenant." To Jethro he directed a small formal nod. Captain Frobisher was a tall erect, clean-shaven man, impeccably dressed in correct uniform, and wearing an impressive row of medals. His hair was white round the temples. He spoke with a very marked English-public-school accent.

"Drink?" he invited. In non-gravity conditions it was not practicable to have the pleasant ceremony of un-corking and pouring out, but by merely handing round the familiar navy-type plastic bottles Captain Frobisher managed to generate an atmosphere of hospitality.

Captain Sloane proceeded to business at once.

"How are your arrangements for evacuation developing, Captain?" he asked.

"My dear fellow," the other protested, "let's not talk business before dinner—"

He led the way into an adjoining room. Down its middle was a long table with a row of chairs along each side. There was a momentary scramble, which quickly resolved itself into a tidy arrangement of Powlags standing stiffly to attention behind their chairs. Captain Frobisher took his place at the head of the table, and indicated where the visitors should seat themselves.

He looked gravely around, nodded and sat down. There was a rustling and clicking and shuffling, and the rest sat down also. Captain Sloane regarded the procedure with calm approval.

Apart from the fact that the majority of the participants were

only five feet tall and bluish in complexion, and apart also from certain difficulties due to no-gravity conditions, the scene was a fair enough sketch of a military mess dinner of five hundred years ago.

In addition to the visitors there were two Powlag officers, six or seven N.C.O.'s and stretching right down the table, about thirty other ranks. These all sat rather stiffly, talking very little, and those who were within earshot attended worshipfully to what Captain Frobisher said. For Captain Frobisher was accustomed to dominate the conversation. "Yes," he told his visitors, "the Martians are a most peaceable people, with no experience of warfare, no history of battles and invasions, no military tradition. As I saw it, we must therefore impose upon them a rigid tradition of obedience and discipline. I therefore adopted as their ideal the tradition and discipline of the British Navy. These men," he waved his hand, "are steeped in the history of the Navy. They could describe more accurately than any historian the events at Trafalgar and Copenhagen—and of course," he continued modestly, "I can honestly claim to be a suitable person to instill this tradition. My family, you know—"

"There were some folks called Frobisher used to live out near my Dad's place in Mars North Polar territory," Jethro broke in. "Would they be relatives of yours, Cap?"

Captain Frobisher regarded Jethro with distaste.

"I'm an Englishman," he replied shortly. "My family is descended from the famous Frobisher who was one of Queen Elizabeth the First's admirals."

Jethro returned to his attempts to talk to some of the Powlags in their own language. It sounded like whistling.

"In addition," Frobisher said, continuing his autobiography, "you'll be surprised to learn that I'm actually a navy man myself."

"But aren't we all?" Jimmy the Navigator asked, puzzled.

"Ah! You misunderstand me. I'm a genuine salt-water man. probably the last of the breed. I joined the British Navy when I was eighteen and actually served afloat for a year. Then of course it was disbanded, and I transferred to space."

"Let me see now—" Captain Sloane, like many humorless people was a whale for figures—"The British Navy was disbanded forty-five years ago—Why! That makes you—"

"No! No!" the other interrupted, "it was much later than that." He seemed more than a trifle discomposed by this effort in simple arithmetic.

Captain Sloane's favourite expression was "Let's get on with the war." As soon as possible he brought the after-dinner conversation to and end.

"Now, sir," he said. "Before I leave can you give me an account of your arrangements for evacuation?"

"Evacuation?" Frobisher raised his eyebrows. His handsome face expressed utmost surprise. So well did it express surprise that for an instant Captain Sloane wondered whether he was really surprised at all.

"Yes, Captain. You know I've been ordered here to cover your evacuation from the Rock. I expect you've had orders covering your side of the manoeuvre."

"Indeed I haven't. I got your signal a little while ago, but I've had no official instructions."

Jimmy the Nav and Jethro, further down the table, stopped talking and looked up.

Captain Sloane knew that since the Rock was a supply base the order for its evacuation must theoretically be confirmed away back at Supply H.Q. But a Jacko attack was expected within the next twenty hours; under those circumstances to refuse even to begin preparations for evacuation until this confirmation arrived was a close approximation to lunacy. Not even the most fanatical enthusiast for correct procedure could justify it.

"These orders are recorded on my log-tape," Sloane offered. "I'll send you a copy if you wish; that'll give sufficient authority to cover you."

"You misunderstand me," Frobisher replied. "I'm not frightened of regulations. I simply believe this evacuation idea is a mistake, and I don't think it will be confirmed. I believe I'm perfectly able to fight off any attack."

"You've never been in action against the Jackoes, sir," Sloane pointed out quietly. "They attacked Station Five last year. They burnt down the main air-lock; two of their ships came right up the main corridor and blew themselves to pieces. The entire rock was split to fragments, all in the space of half an hour. But this is beside the point. Orders have been made to evacuate this base. I'm responsible officer and you can't refuse to accept them from me. I'll send you a copy of the tape at once, and if you don't start to prepare for evacuation immediately I'll signal the fact back to my Squadron and you'll probably find yourself relieved of your command."

Captain Sloane was still speaking quietly; the Powlags nearby could not hear him even if they understood English.

There followed a considerable stretch of complete silence.

Frobisher flushed angrily. "This isn't the sort of talk I'm prepared to tolerate," he retorted. "I must remind you that I'm your senior, and that what you've said amounts to a threat of blackmail."

"I regret the situation, Captain," Sloane replied. "But I didn't create it. It's you who're being pig-headed."

Frobisher was tracing patterns on the table with his fore-finger. He wore a small sly expression now which did not go well with his dignified manner.

"I've been brought up in the traditions of the naval service," he said. "It's bred in my bones. I like correct procedure and proper conduct. I also dislike very much evacuations and retreats. However I'm not as pig-headed as you suggest. I'll do as you ask. I'll accept the evacuation order from your hand and start things moving at once."

"Well, that's fine," Captain Sloane said. "Thank you sir—I'll send Sergeant Jethro over here presently to help with equipment. He's a sound man despite his manner. He's got a talent for organization and he speaks the Powlag language."

"The old gentleman is plain nuts," Jethro exclaimed when they got back to the *Tadpole.*

"He's living five hundred years behind the times," Jimmy the Nav speculated. "Did you get a look at his library? *History of the British Navy* in Eight Volumes. *The Battle of Trafalgar. The Campaigns of Nelson. Naval Engagements in the First World War. The U.S.-Japanese War in the Pacific.* Some modern ones too—*Tactics and Manoeuvres in Space Warfare.*"

"There ain't no tactics in space," Jethro objected. "Just hunt 'em out and burn 'em down—quick, before they do it to you."

"There's something odd about the man," Captain Sloane mused. "I've met red-tape hounds before and he doesn't resemble that type. He's too intelligent. And in certain respects he is almost too good to be true. His English accent's the fruitiest I've ever heard. How does he speak Powlag, Jethro?"

"There's a funny thing, sir," Jethro said. "I've always held no human-being could ever learn to speak that lingo properly. I was brought up near a Powlag community, and I speak it just enough to put across simple ideas. But this Frobisher bird talks like he was three-parts Powlag."

"That's why he got the appointment, of course," Jimmy the Nav pointed out.

"Yes, but he's English. Home bred stock with a public school accent thick enough to grow asparagus in."

As was usual with these supply bases, the Rock was provided with an old space-craft for emergency use, laid up in a parking-bay below the surface. The personnel of the rock and much of the equipment would be transported back to Mars in this ship, but some part of the gear had to be carried by the *Tadpole.* There was very little surplus space inside the *Tadpole* and in any event Captain Sloane must be in a position to jettison his load if he had to fight, so the *Tadpole's* share of the burden had to be carried externally in nets.

He sent Jethro over to the Rock to supervise the allocation of equipment as it was dismantled. He did not warn Jethro to keep out of Captain Frobisher's hair, partly because any such instruction might merely incite Jethro to tangle with the old man, and partly because Jethro if given a job and left to himself could generally be relied on to get it done properly.

Captain Sloane was therefore considerably disappointed when Jethro returned to the *Tadpole* at the end of three hours.

"Ordered off, sir," the latter reported. "Insolence to an officer."

"Let's hear the facts, Sergeant," the Captain asked.

"I reported to this Commanding officer as ordered—was received quite civil-like, then proceeded to make my rounds, inspecting equipment, estimating bulk, and so forth. Later I went back to the Captain's cabin to ask a couple of questions. Right away he pounced on me, all stern and old-fashioned like. 'That's enough, Sergeant. I won't tolerate that talk aboard my command.' Presses a button, orders two Powlags to escort me back to the lock and to see me off the premises. All very unexpected-like."

"What particular form of words did you use?"

"The only thing I said was 'web-feet,' sir."

"You called him web-feet?"

"No, sir. I called you and the Nav Officer web-feet. I says something like this: 'Being Martian-born I'm better able to get along with Powlags than those two web-feet over in the *Tadpole.*' You see, all us Martians call earth-folks web-feet, sir. Us kids was brought up to believe the whole earth was mostly water, and the rest of it so muddy that you needed web-feet to get around."

"What d'you think his real motive is?"

"There's something he doesn't want found out, sir. Could be about his dealings with the Powlags. Me being able to speak to

the Powlags he reckons I'm most likely to find out, so he treats me civil till I slip up and give him an excuse to toss me out."

"I see. Though with such a typically English-officer-style—so true to type he's almost a caricature—I can't imagine any sort of funny business with the Powlags. Anyway, unless Captain Frobisher makes a complaint about your behaviour I needn't do anything about this incident."

But Frobisher contented himself with advising the *Tadpole* skipper coldly that he could not tolerate Sergeant Jethro aboard his command.

So Jimmy the Nav went across in Jethro's place. At the end of six hours he also returned.

"Don't tell me you've been ordered off too?" Captain Sloane asked.

"Not me. I quit just before things reached that stage. The fact is the old coot is clean balmy. You'd think this evacuation business was pretty simple. First, get that space-can of theirs mobilised. Secondly, stow enough grub and atmosphere in it to last out the trip back to Mars. Thirdly, unscrew as much equipment as we can transport, stow most of it in the space-can and haul the rest over to the *Tadpole*. Fourthly, stack the rest of the equipment round the Rock's main power pile. Finally, embark personnel and blast off. At one hundred miles activate the pile by remote control, the rock splits up, the equipment is vaporised, then heigh-ho for Mars at full blast.

"That's how I see it," Captain Sloane admitted.

"Well, it's not so simple the way Frobisher does it. He has returns of equipment made; he prepares an evacuation programme and holds committee meetings to discuss and amend it. Worst of all, he refuses to wheel the space-can out from its dock because a couple of gun-turrets must be dismantled in order to do so."

"In fact, he's doing nothing."

"He's as busy as a little bee," Jimmy the Nav said bitterly. "He has those Powlags going round the place like a swarm of ants. But as you say, the progress towards evacuation is precisely nil."

"I think I can see his point of view," Sloane reflected. "He's trained those people to fight and he wants to try them out. He's an old man—and this evacuation may finally land him on the shelf."

"Nice place that shelf," Jimmy said. "I'd be glad to be there myself."

"Me too," the Captain agreed, "But this Frobisher's something different. We're here to do a necessary job, but he's playing soldiers and he'd like to keep on playing even if it kills him."

"And it will—the Jackoes can knock this place apart in half-an-hour."

"I can ask Frobisher to estimate his departure time, when I can signal this to Squadron. That may stir things up," the Captain reflected.

"We'll have the Jackoes flocking round us before you get old Frobisher moving," Jimmy estimated.

He was right.

There is no chance of a surprise attack in space warfare. The Jacko force was detected on the radar while it was still many millions of miles away. It appeared as a small smudge in one corner of the screen, from which it was impossible to estimate its numbers.

"Well, that's something settled," Captain Sloane remarked. "No time for evacuation now. Get the *Tadpole's* elastic wound up and prepare to blast. Signal Frobisher that we'll go forward to engage the Jackoes and carry out harrying attacks."

Frobisher's reply was typical. "Good hunting!" he signalled. "Leave some of the birds for our guns."

"Still playing soldiers," Captain Sloane observed.

Five hours later the smudge had separated out into a swarm of small specks, each speck a Jacko ship.

The cluster of little specks expanded on the screen until it looked like a swarm of bees. The Captain did things with the range-finders.

"Their present line's taking them beneath and to port about a hundred miles. If they run to form they'll not turn aside from their objective, but they'll detach a group to deal with us."

Jethro had his battle screens operating—these gave him a vision in every direction, forward, rear, above and below—and was in communication with the two gun-layers. The navigator's task during an engagement was unspectacular—he had to compute changes in speed, direction and position—no easy matter when the ship was manoeuvring continuously in three dimensions.

The swarm of bees was so close now that it almost filled the screen. Jethro talked his own jargon to his two men. This was his moment. In effect he was in command of the ship from now on. It would be manoeuvred for the sole purpose of giving him targets. The *Tadpole* ponderously turned itself round till it faced back

towards Rock 83 and began to accelerate. The enemy ships, however, continued to overtake.

Captain Sloane watched his creen. Jethro did likewise with his. Jimmy the Nav had nothing to do but watch the computer which measured off the duration and value of acceleration.

"Ah!" the Captain exclaimed. "Six detached from the main fleet, turning in our direction."

"I'm going to hold our fire down to half maximum effective range," Jethro announced. "We've got a busy day ahead and I think we should keep our full hitting range as a pleasant surprise for them later—and will you keep 'em strung out, sir?"

"They'll do that unaided," the Captain assured him. "Line astern attack—the classic Jacko tactic."

Jimmy the Nav who had nothing else to do, looked out of the port. Very soon he saw the enemy with his unaided eye, coming up astern. They were at first six dots against the luminous darkness of space, then they achieved length and depth and a glint of scarlet where the sun caught their flanks.

This first attack was quickly disposed of. Jethro said: "Port gun take first, third and fifth. Starboard take second, fourth and six . . . Ready to fire—Fire!"

Jimmy saw vivid blue pencils of light stab out from the D-emitters. Three from one side, three from the other. Then there appeared six brilliant flashes from somewhere astern.

"Six little b——s who'll never go home to momma," Jethro rejoiced into his intercom, "But plenty more where these came from. Charge capacitors."

The auxiliary dynamos began to whine to replace the tremendous jolts of energy expended by the rays. The main body of the enemy, moving at higher speed, passed the *Tadpole* some distance beneath and to starboard.

"Looks like they don't mean to divert any others to attack us," Captain Sloane surmised. "Let's stir them up a little. Stand by for full acceleration."

The *Tadpole* jockeyed itself around lumberingly, then charged slantwise down towards the enemy. The Jacko ships seemed to leap towards them. Captain Sloane cut the acceleration at the last moment to let the gunners swing their weapons. The *Tadpole* darted among the swarms of ships like a whip-lash. As it passed, the blue rays lanced out to left and to right. Jimmy the Nav, the idle man of the party, counted four flashes.

The *Tadpole* checked her speed and ponderously heaved herself round. In that brief time the enemy ships had grown too small to

be seen except on the screen. The *Tadpole* hurled herself towards them again.

To the Jackoes in their small ships the *Tadpole* must have seemed to be a huge and terrible and fearsome object as it tore through their midst, dealing out destruction, but the Jackoes were courageous and resouceful fighters and they were probably well aware that massive though it was, a single flick from a D-ray could transform it instantly into a brief flash of orange flame.

As they made their next run in Captain Sloane saw certain of the enemy turn away from the main swarm.

"They're manouevring to attack from several directions," he warned Jethro.

The *Tadpole* passed through the Jacko fleet once more. Its rays flicked out. Two enemy ships exploded. A third hurtled straight towards them. The *Tadpole's* starboard ray wiped it out of existence at the last instant. It was so near when it exploded that for a brief moment a lurid red light lit the interior of the control cabin.

"There are two on our tail," Jimmy announced.

"As if I didn't know," Jethro answered, "but I'm not opening up to max range just yet."

From now on the *Tadpole's* attacks were less successful. Every time she made a run-in towards the enemy, groups of the little red ships deployed to counter-attack from every direction. She raised her score by three in the course of the next ten attacks, and by way of penalty the number of the enemy hanging on her tail increased to six. These tagged along behind doggedly, following every turn and twist, but staying as they thought out of range.

In this fashion the Jacko fleet with the *Tadpole* snapping at its heels reached the vicinity of Rock 83.

Sparkles of flame ran along the enemy ranks as jets flared and groups detached to circle the rock. A few moments only were spent in spotting surface turrets, then in groups of six in line astern, the red ships hurled themselves at the Rock. Jimmy the Nav saw stabs of flame begin to spout at regular intervals from the gun-muzzles sticking out of the armoured domes.

Simultaneously the six Jackoes lying on the tail of the *Tadpole* spread themselves apart and began to move nearer.

"Get these now, Jethro," the Captain said.

Jethro spoke to the gunners. Pencils of flame longer and fiercer than before shot from the emitters. In quick succession the six enemy ships were disrupted.

"Now," Captain Sloane said, "let's collect some more specimens before they get wise about our true weapon range."

He set the *Tadpole* to circling on the fringes of the Jacko pack, who were peeling off six at a time to dive down on the Rock's gun turrets. These mounted conventional artillery firing solid high-velocity projectiles which did not invariably cause an enemy ship to explode when hit, but there was plenty of evidence of hits—Jacko ships tumbling end over end or drifting sideways aimlessly out into the darkness of space.

The *Tadpole* continued to add to her score.

"If the Jackoes have any failing as fighters, it's their suicidal determination to pursue any objective," Captain Sloane commented.. "They'd be wise to break off this attack on the Rock and turn their whole formation to the job of running us down. After all, they've got lighter ships, better acceleration and greater manoeuvrability—and the rock would still be in the same place after they'd liquidated us."

"Better not say that so loud, sir," Jethro cautioned. "They might overhear you."

It almost seemed that the Jackoes did overhear this remark and decided to act upon it, for a large number of them—perhaps twenty-five—turned towards the *Tadpole*.

"Now we turn tail and fight a rearward action," Captain Sloane decided, and pulled the ship round in a tight curve. They swept past the Rock at no great distance. A number of the gun-turrets had been destroyed already. Jimmy got a glimpse of a Jacko ship lying among the twisted girders of one dome.

Then they were off into deep space, with a pack of Jackoes trying to climb up their jets.

The day wore on. The *Tadpole* continued to survive and to fight, rather to the surprise of her crew. Jackoes were numerous, small, manoeuvrable, and their pilots suicidally courageous. *Tadpole* was massive, slow and lumbering to turn, but its weapons reached out in all directions, swift and flashing like swords. Tactics reduced to a simple formula—keep the Jackoes continuously strung out; never allow more than five of their ships within striking range at one time.

As often as he could Captain Sloane turned the ship back in its tracks and thus on several occasions the running battle swept past Rock 83. Each time Jimmy was able to note that some of its guns were still firing; each time there were a few more Jacko ships floating aimlessly off into space; each time the circling swarm of

enemy seemed to be strung out thinner. But each time fewer guns were firing from the Rock, and later it was seen that the large air-lock to the main passageway had been destroyed, reduced to a gaping cavern in the rock face, partly blocked with tumbled and broken rock.

"Those peaceable Powlag friends of yours seem to have got all the right ideas about this fighting business," Jimmy remarked to Jethro.

"Yes indeed!—Glory Hallelujah!" the latter agreed, not without pride. "I'll sure tell this story next time I'm home on leave . . ." he stopped at that word, for their chances of getting home on leave did not seem at this particular moment to be worth much.

The battle seemed to have lasted for ever. The three in the *Tadpole* control cabin felt as if they had lived their whole lives in this world of continually changing accelerations, of twisting ship, groaning girders, shouted orders, and the intermittent high whine of the dynamos which re-charged the capacitors. All this seemed to have been going on for ever, and they knew in their hearts that it would continue, the Jackoes never gave up; sooner or later Captain Sloane would make a bad decision, or perhaps one of the D-ray emitters would break down, or else the Jackoes would silence the guns on the Rock at last and turn their whole force to attack the *Tadpole*. The end of the fight—the end of the *Tadpole*—the end of themselves—would come in a single swift expanding flash of detonating fuel tanks.

The end came in a way that none of them would have believed possible. They were first of all aware that they had out-distanced and out-manoeuvred the enemy, and then that the latter were retreating. Then, when they made a run back towards the Rock they discovered that the attack had been broken off there also. The remnant of the enemy were streaming off into the darkness of space.

"It isn't lack of guts" the Captain surmised. "So it must be shortage of fuel. The fight's been a very much longer and more complicated affair than they expected, and no intelligent being—not even a Jacko intelligence—is going to keep it up till their whole fleet of ships lies helpless through lack of fuel."

The *Tadpole* slid alongside the Rock, and brought herself to a standstill with short bursts of the forward jets. No damaged Jacko ships were now to be seen; in accordance with their usual practice the Jackoes themselves had destroyed them all before withdrawing. On the Rock itself only one of the gun-turrets in sight appeared to

be serviceable, all others being reduced to a rubble of melted and twisted girders.

The Rock made no reply to the *Tadpole's* signal.

Captain Sloane and Jethro climbed into their suits and squeezed through the lock. They jetted themselves over to the Rock.

They found it impossible to get in via the main entrance, where some of the shattered stonework was still glowing with heat. Round the other face of the Rock however, they managed to force an entrance by way of a small lock intended for getting access to the radio antenna and other external equipment.

They groped along a small unlighted and atmosphereless passage until after passing through another air-valve they found themselves in the main corridor.

This was lighted and still held its air, so they discarded their suits and floated themselves along in the direction of H.Q. They passed a Powlag lying crouched against the wall, his head hidden in his hands. It seemed at first that he was dead, but as they drew near they heard him moaning and muttering to himself. There were other Powlags along the corridor, but all of these were unquestionably and extremely dead.

They turned from the main corridor into the passage leading to the administrative quarters. Here there were Powlags lying on stretchers. As they proceeded the faint sound of voices reached them—voices chanting in a weird non-human fashion.

"Sounds like they've burnt out their gyros and gone clean off their rockers," Jethro remarked. "And I can't say I'm surprised—this is the first time any of their race have had a bashing of this sort."

The curious chanting sound grew louder. It was coming from Captain Frobisher's cabin. They pushed open the door and went in.

There were seven or eight Powlags sitting on the floor in a circle, and it was they who were doing the chanting. In the middle of the circle Captain Frobisher lay on a stretcher. He was evidently very severly wounded, though still conscious. Jethro gripped one of the Powlags—he was one of the officers—and brought him to his feet.

"What's the matter with your Captain?" he asked.

The Powlag was wagging his head back and forward, shouting and babbling in his own language.

Jethro shook him. "Pull yourself together, Joe," he said. "What's wrong with Frobisher?"

The little blue man steadied up and looked from Jethro to Captain Sloane. Then he started talking again, not so hysterically this time.

"Take it slower, Joe," Jethro urged, quite gently for Jethro. The fellow started over again more coherently. Jethro listened.

"As far as I can make out, sir," he translated presently, "the Jackoes knocked out most of the guns pretty quickly and that means they killed a lot of Powlags. Then they turned their attention to the main lock. They worked on the rock round the actual door with their D-rays until it was all shattered, then the whole construction blew out under atmospheric pressure. Their next move, of course, was to try to get a couple of their ships right up the passage, but Frobisher let the first Jacko ship get its nose into the opening, then dynamited about a hundred yards of the outer passageway. He had prepared for this weeks ago and he fired it off himself. He brought a whole lot of the passage roof down on top of him. He's all crushed and smashed up."

"Have a look at him, Sergeant," Captain Sloane told him.

Jethro went over and sat down beside Frobisher. The injured man was moaning and talking and muttering to himself. Captain Sloane went among the group of Powlags until he found one of the officers who could speak English. He ordered him to round up all uninjured survivors and to send them to every part of the Rock to check up on wounded.

Jethro, rather surprisingly, continued to sit beside the dying man for quite a while, listening to his mutterings and sometimes answering. About an hour later he came along to find Captain Sloane busy in another part of the Rock.

"Well," he announced, "he's dead."

"That's the way he wanted it, I reckon," the Captain said. "He stalled and delayed and was generally pig-headed solely because he wanted to stay and fight rather than go back home. Well, he was a fighting man; his ancestors were fighting men. He's proved he's worthy of them all."

"Now here's a funny thing, Cap," Jethro said. "You that reckons you understand human nature will be knocked flat when I tell you. It turns out Frobisher wasn't an Englishman at all. He didn't belong to an old military family. His folks have never been in any Navy, unless perhaps they were forced into it sometime. He belongs out on Mars. His dad was that old fellow Frobisher I mentioned at the dinner-party, and a good-for-nothing bunch of scalliwags these Frobishers are, let me tell you. I began to suspect something that time he chucked me off the Rock—he was scared I'd catch him out. Now—well—a little while ago he was babbling away to himself in mining-camp Martian slang—no trace of his public-school English accent."

"So what does all this mean?"

"I guess when he ran away from his Dad he shipped back to Moon Base and started giving himself airs, letting hints drop that he was something not so ordinary. Maybe he was taken up by important folks and got invitations out on the strength of his own yarns. The more he told the story the deeper in he got. I expect after he pitched the tale that he belonged to this Elizabethan family he had to do a lot of studying to get the facts right. In the end he talked himself right into the part and got so he believed it himself."

"I see . . . Of course, it all checks up. I always felt he was almost a caricature of an Englishman. Tell me, Sergeant—a man like that's a fake and a phoney—but if he fakes so hard, and plays the part so well and becomes the first commander of a fuelling-base to beat off a full-scale Jacko attack, and if he goes so far as to get himself killed doing a heroic deed such as would not disgrace these pretended ancestors of his, is he still a fake and a phoney?"

"Don't ask me to answer that one, sir. What I say is, human nature is the most curious and unpredictable and interesting thing in this old universe. I reckon it always was and always will be."

Alan Barclay

THE LITERARY LINE-UP

Francis G. Rayer has the lead novelette next month and in "The Voices Beyond" he has created all the atmosphere and suspense which made science fiction so popular in the 1930's. It deals with a collision between Earth and some mysterious objects of inert matter—in a very modern manner. John Brunner and Kenneth Bulmer both have long stories, plus the inevitable E. C. Tubb and departments.

The issue will be rounded off with the final instalment of Wilson Tucker's "The Time Masters" and we would assure readers that there is nothing similar in this story to the plot of his short story in the last issue of *Science Fantasy*.

Story ratings for No. 37 were:

1. Boarding Party ... ... James White
2. Butch ... ... Poul Anderson
3. No Space For Me ... ... Alan Guthrie
4. Paradise II ... ... Robert Sheckley
5. World Destroyer ... ... E. R. James
6. Perac ... ... E. C. Tubb

It has been stated on many occasions by eminent scientists that the chances of a spaceship being hit by a meteor while between the planets is infinitely remote—in the nature of millions to one—nevertheless these specks of cosmic dust will still be a problem. Meanwhile, they can give us considerable information about extra-terrestrial conditions.

CELESTIAL DEBRIS

By John Newman

The brief flash of a ' shooting star ' across the night sky is an ever familiar sight on this planet and was once the subject of much speculation, until it was shown that shooting stars are in reality meteors—extra-terrestrial masses ending their lives in a short, fiery dash through the upper atmosphere. But this is only recent knowledge; the ancient Greeks considered them to be atmospheric phenomena and the word meteor originally covered all aerial displays such as clouds and rainbows.

Twenty million meteors enter our planetary atmosphere every day but only about four or five moderate sized ones reach the surface to become, by definition, meteorites. It is just as well that we do have the atmosphere as an invisible shield to protect us from this intense bombardment; it is so efficient that there has yet to be a well authenticated case of a human death being attributed to a meteorite, although several houses have been struck by them, one in Bohemia in 1847 and another in Scotland in 1917.

The surprising thing about meteors is their very small size, which appears to be far out of proportion to the amount of light that they emit. Those giving light equivalent to stars of first or second order of magnitude are only between a tenth and a fifth of an inch in diameter and their trails can sometimes be seen during the day as a thin wisp of cloud high in the sky. Their brilliance is solely due to their tremendous speeds so that, when they are slowed down, their kinetic energy is transformed into heat and light. Measurements of the absolute

velocities of meteors is most informative for any body falling through space from outside the Solar System towards the Sun is accelerated by the Sun's gravitational field so that it must have a velocity of at least 26 miles a second when passing the Earth's orbit. This is equivalent to the escape velocity from 93 million miles from the Sun outwards until the pull of the Sun is negligible.

In actual fact, it has been found that the speeds of meteors vary between 8 and 50 miles a second so that the faster ones are strangers from other star systems that have traversed interstellar space. Their journeys must have taken them at least 20,000 years from even the nearest stars. It is unfortunate that these extra-Solar System ones are all completely destroyed by their high speeds and none of them reaches the surface of Earth, although we shall find plenty of them sprinkled over the surface of airless Mercury and the Moon. It is only the low-speed meteors originating from within our own system, as shown by the fact that only a very small part of their surfaces are burnt away, that we find as meteorites and are able to thoroughly study.

One peculiarity of meteors is that they sometimes occur in great showers; in 1833 the Leonid shower, from the direction of the constellation Leo, sprayed 200,000 shooting stars across the sky in a matter of six hours. This happened again in 1866 and it was then discovered that this shower not only re-occurred every 33 years but that its orbit was identical with that of Tempel's comet. Seven other meteor showers follow the same regular paths around the Sun as did seven other comets and it was realised that these showers are the debris of the solid heads of comets. Meteor showers tend to gradually die out as they are randomly scattered by the gravitational fields of planets, the orbits of those nearest to a planet being bent more than those further away. Massive Jupiter has more affect on them than any other planet.

But not all meteors come from other star systems or from the disintegration of comets; many of them, particularly the low speed ones, are small asteroids with elongated orbits that intersect that of Earth and it is this type that reach the surface and are found as meteorites.

The greater majority of meteors are smaller than peas and the flash of their extinction lasts for only a second. However, by photographing them, it has been found that their brightness increases towards the end of their paths and that there are often minor explosions before the final outburst of light as they are destroyed. Their paths are visible for many seconds, or even minutes, and this is due to both material vapourized from the surface and to ionization of molecules of the air by the very high temperatures produced. The heat is mainly due to compression and not to friction of the air. At the speeds at

which meteors travel—about a hundred times that of a high velocity bullet—the air in front of them cannot get out of the way fast enough, piles up and is highly compressed so that it becomes white hot, an extreme example of the way that the air in a bicycle pump gets hot when compressed.

Whilst the rarefied air at the height at which this occurs is a bad conductor of heat, the compressed atmosphere easily conducts heat to the surface of meteors so that it first liquifies and then vapourises, leaving a trail of glowing gas and vapour. The spectra of these luminescent trails shows the presence of hydrogen, calcium, magnesium, helium and sodium, all well-known terrestrial elements.

Meteors sometimes strike the atmosphere almost parallel to the surface and have very long paths, in some cases from one horizon to the other. Such a meteor sped across England in three seconds on the night of the 24th of March this year. It finally exploded at a height of 200 miles, the trail being visible for twenty minutes. Occasionally the shock waves from the larger ones are heard, sounding like the noise of distant thunder.

Their height and speed can be accurately measured using radar for, although the meteors themselves are too small to be detected, their trails do reflect the radar waves enough for details, such as the fact that the centres of the trails do not reflect radar, to be observed. In this way it has been found that small ones become visible at a height of 75 miles and are usually destroyed before they reach 50 miles. Larger ones become visible at very much greater heights and their paths, if their speeds are low enough, can extend down to the Earth's surface. However, it is more likely that a large meteor will explode in the air and complete its journey as a number of small meteors.

The atmosphere acts as such an efficient shock absorber that the lower trajectory of meteorites is merely that of a body falling at a few hundred feet a second. Those that survive the fierce deceleration land fairly gently and rarely penetrate more than a few feet into the ground. In several cases they have landed on frozen lakes and not even cracked the ice.

But, so short a time does the journey through the atmosphere take, their molten exteriors have no time to transfer the heat to their centres and, whilst a freshly fallen meteorite is hot to the touch, its surface soon loses its heat to the interior and a coating of frost forms on it. It is almost as if the environment of space reaches down for an instant to warn us of the frigid conditions outside.

The really tiny meteors, about a ten thousandth of an inch in diameter have such large area to mass ratios that they are quickly slowed down

and are able to radiate their heat so that they are not destroyed. They and the condensed vapours from disintegrated meteors drift down as impalpable dust, most of it falling in the seas and oceans. Analysis of the ooze from the deep ocean floors, particularly of samples taken far from land where there are few currents to disturb or cover them with river sediment, show a relatively high proportion of nickel and iron that must have been deposited over thousands of years.

Meteorites are, so far, the only samples of extra-terrestrial material that we are able to handle and thoroughly analyse and study under controlled conditions. A great deal of work has been done in an attempt to determine the origin and past history of meteorites by chemical and physical methods of analysis. Early attempts to show that they carry bacteria from space were never successful due to the impossibility of collecting meteorites under sterile conditions. Of course, with space travel a reality it will be possible to go out and collect samples, picking those with the required mass, speed and direction. These could be studied in the vacuum of space just as they are found naturally—no contamination by terrestrial bacteria and no surface heating beforehand. Until then it is impossible to be dogmatic as to whether or not meteorites carry bacteria or spores and can seed a new planet cooling after its birth. Some meteorites contain carbon compounds that can be extracted with organic solvents.

Very large meteorites have fallen on Earth. One with a mass of about 13,000 tons fell near Canon Diablo in Arizona leaving a crater almost a mile across and 600 feet deep. It was estimated from the weathering of the exposed rocks that this occurred between one and five thousand years ago and attempts to mine the metal in it have failed because it buried itself so deeply. More recently, in 1908, a 250 ton one fell in North Siberia and devastated 4,000 square miles of the country, smashing down trees over a radius of thirty miles. It apparently broke up before it landed as a number of small craters, the largest being 150 feet across, were found. Other very large craters and lakes due to water-filled craters have been discovered in Canada and Australia.

However, most meteorites are very much smaller than those; there is a 33 ton one in the Hayden Planetarium in New York and a 60 ton one has been discovered in South Africa. They are frequently the object of worship as stones from heaven, the sacred stone built into the Kaaba at Mecca is an iron meteorite. From these sizes they range down to small spheres looking like lead shot. The medium-sized ones are irregular in shape and their surfaces are pitted with depressions that, when they are not due to weathering and corrosion after they

have fallen, were caused by other meteors colliding with them whilst they were in space. Every freshly fallen meteorite is covered with a thin, black, polished layer of fused material about a millimetre thick.

There are two main types of meteorites, those principally composed of stony material being known as aerolites whilst the metallic ones are called siderites.

The composition and structure of aerolites is similar to that of the older rocks of Earth that have cooled and crystallised from a molten mass. But they invariably contain metallic iron, rarely found on Earth in the natural state, and some contain minerals that cannot exist in the presence of water, suggesting that they were formed in the absence of an atmosphere containing water and oxygen. Few aerolites are found on Earth because they disintegrate more easily during their fall and are difficult to distinguish from ordinary stones once they have been exposed to the weather.

It has been long postulated that the planet Earth is made up with a nickel-iron core surrounded by the stony surface and it appears that the stony meteorites correspond to the surface of a planet that has exploded, whilst the metallic ones correspond to the core of such a planet. Analysis now shows that meteorites were small asteroids that were originally part of the group of small protoplanets that broke up between the orbits of Mars and Jupiter to create the asteroid belt and several of the moons of the Solar System. It has even been found possible to determine the structure, size and age of these hitherto mythical planets.

Most of the work has been done on the metallic meteorites as they are more informative and are more plentiful than the other type. From the patterns formed by the nickel-iron alloy it has been shown that they must have been crystallised over a period of several million years under a pressure of more than a thousand atmospheres, as would have occurred in the core of a moderate sized planet. The patterns are also distorted as if the giant pressure that was present had been suddenly released by the disintegration of the planet.

The amount of the isotope of lead formed from the uranium in them indicates that the protoplanets cooled enough to crystallize some 4,500 million years ago, whilst the amount of helium-3 formed by cosmic rays indicates that the disintegration occurred some 300 million years ago, assuming that the cosmic ray intensity in space has not altered much during this time. It is probable that the break-up was caused by two of the protoplanets colliding, their sizes being between 30 and 500 miles diameter.

John Newman

Author Tubb has long been interested in stories dealing with psychology and psychiatry and the problems facing human beings when their mental abilities are impaired or when the mechanical circumstances of a situation overwhelm the faculties of a human mind. Each new story he presents finds yet another facet of this absorbing subject, which is almost limitless.

LITTLE GIRL LOST

By E. C. Tubb

They showed me the professor and then they told me what they wanted me to do. It wasn't a hard job, physically that is, but I could see that it would be more than wearing in other ways. I hesitated, they didn't seem to mind that, and then I took another look at the professor. That was easy because they had him behind one-way glass.

He was dressing a little girl's hair. I could tell she was little and what he was doing by the way his hands hovered about three feet above the floor. He took his time about it, brushing, combing then weaving the hair into plaits. Two plaits tied with ribbon and he made hard work of the bows. When he had got them just right he kissed her on the forehead, tickled her under the arms, and then sent her out to play.

A nice, normal, everyday scene. The sort of thing every father does if he's lucky enough to have a little girl. The sort of thing every father has to do if he's unlucky enough to lose his wife. Nothing to it.

Only it was two in the morning in the centre of one of the most closely guarded places in the world. There was no brush, no comb, no ribbon.

And no little girl.

"It's his mind," whispered the colonel. He didn't have to whisper, the professor couldn't have heard him had he shouted but he, like me, felt that he should lower his voice. "To him she's still alive, his daughter I mean, and he can't accept the fact that she's dead."

"When?"

"Six months ago. Hit and run driver, we never did find out who did it."

"And the mother?"

"Died in childbirth." The colonel stared through the one-way glass. Inside the soundproofed room the professor had sat down at the desk and was busy with pencil and paper. The colonel sighed and I limped after him as he led the way back to his office.

Cottrell, the psychologist, was waiting for us and he passed cigarettes as we sat down.

"Well," he said tightly, "what's your reaction?"

"Do I have to have one?" I accepted a light from the colonel and blew smoke towards the desk light. "I assume that you've a reason for keeping him where he is and I also assume that you've a reason for offering me a job." I looked at the colonel. "Incidentally, why me?"

"Security whitewashed you, the Air Force didn't want you, and you happen to resemble the professor when he was young." Cottrell spoke before the colonel could answer. "Also, the professor has a natural sympathy for the afflicted."

I could have felt anger but I didn't. The accident which had blasted me out of the Air Force had also left me with a crippled leg and it isn't nice to remind a cripple of what he is. I guessed that Cottrell was sore at my getting the offer and said so. He shrugged.

"Sorry, but that's the answer. It's important that the professor likes you. He doesn't like me or any of us here. If you take the job you'll have to be closer to him than his own skin and, above all, you mustn't upset him in any way. It won't be easy."

"I know that," I said. "But why? What's the point?"

The colonel hesitated and I knew that I was treading on thin ice. Security ice, the sort which cracks if you so much as read the wrong newspaper. But the colonel was intelligent, he knew that no man can do a good job if he doesn't know what he's supposed to be doing. He took a chance.

"The professor is important," he said slowly. "I can't tell you how much or in just what way, but if I said that the future of this country depended on him I wouldn't be exaggerating. He was working on . . . something . . . when his daughter was killed. It upset him. It almost ruined his mind so that, to us, he was useless. He only began to work again when he'd established his delusion." He looked at me through the smoke of his cigarette.

"He refuses to work here any longer. We can't make him. We can keep him here, yes, but only as an idiot. We don't want that. We want the genius of his mind and to get it we have to play things his way. We have to let him go so that he can work where he likes and when he likes but we daren't let him go unprotected. So we want you to stay with him as a sort of friend and bodyguard. You keep

him working, you pass on his findings and, above all, you keep him happy." He sighed. "I know that it seems crazy, but if you know a different answer I'd be glad to hear it."

"I see." My estimation of the professor had risen. "Does he give any reason for wanting to leave here?"

"Yes." Cottrell sounded bitter. "He says that it's no place to bring up a young girl." His laugh was more of a snort than anything else. "He's perfectly right, of course, and, as we've got to humour his delusion, we've got to agree to let him go."

"And we want you to go with him." The colonel looked anxious. "Will you?"

I nodded. I was now a nursemaid to a ghost.

At first things were a little stiff. The professor liked me, yes, but he was not used to having me around. I knew that the first thing to do was to break down the barriers of his isolation and, the way I did it, was to make friends with Ginney.

She was ten years old, a cute youngster with long, plaited hair, a freckled face, and cheeky blue eyes. She had been around quite a bit, was full of the devil, and loved fun. She also liked plenty of conversation.

She had also been dead for six months.

It wasn't easy to make friends with a ghost. I studied her photograph until I saw her in my sleep. I watched the professor until I knew just how she must look to him. I made myself imagine her, talk to her, listen to her answers and then talk some more. I memorised her history so that we'd have points in common and, all the time, I had to guard against a single slip which would have destroyed the professor's trust in me. That, in itself, wasn't too important, but I dare not injure his belief in his delusion. It was the only thing which kept him sane.

I passed the major hurdle one night in a little hotel near the border.

We had been travelling south because, as the professor said, Ginney needed the sun. I shared a room with the professor, I had booked another for Ginney, and he was getting her ready for bed. I had watched the play a dozen times, the undressing and putting on of the nightclothes. The undoing of the ribbons and the brushing of the hair. I sat and watched as his hands, thin with thick blue veins, the fingers long and sensitive, clutched the invisible handle and brushed the invisible hair. I leaned forward.

"Let me do that."

"You?" He hesitated, a flicker of doubt in his eyes.

"Yes." I grinned. "You don't mind me brushing your hair, do you, Ginney?" I pretended to listen, then snorted. "Of course

I won't hurt you. Why, I brush my own hair every day." I grinned at empty air. "Look, tell you what I'll do. If I catch a snag I'll tell you a bed-time story. Right?"

I listened, nodded, then stretched out my hand for the brush.

For a moment I thought that it wouldn't work. He hesitated, moving his hand beyond my reach, the doubt growing in his eyes. Then, very slowly, he moved his hand back towards me.

I took the brush from his hand. I caught hold of Ginney and made her stand in front of me. I turned her and, carefully, I began to brush her hair.

It was the hardest thing I have ever done.

Because it wasn't enough to play-act. I had to really brush the hair of a real girl and that meant it wasn't enough just to pass the brush through air. I had to turn it, to drag it, to move in on the same plane, to avoid snags and to follow the contours of a head. I had to do that and, at the same time, control the wriggling of a cheeky ten-year old. I had to do all this while being watched by a man who had based his sanity on a delusion which I was helping to maintain. I had to do a good job.

I was soaking with sweat by the time I had brushed the hair and my hands were trembling with strain. But I hadn't yet finished.

"*You caught a snag*," said Ginney in my mind.

"I'm sorry," I said aloud. "I didn't mean it."

"*You promised me a story*."

"I know and I'll tell you one." Deliberately I put down the brush. "Go and kiss your daddy goodnight." I waited while the professor bent his head then waited just long enough for her to return to me. I rose, stooped, picked her up and carried her towards the door. I opened it, awkwardly as a man would who carried a child, closed it and then, because I daren't for one moment relax from the pretence, carried her towards the bedroom, drew back the covers, tucked her in and sat down on the edge of the bed.

Almost I yielded then. Almost. But a sound, it may have only been the creaking of a floorboard or it may have been the professor following me, urged me to continue. So, sitting in the darkness, I told the story of the Three Bears, then Red Riding Hood, and then, just to make certain, the one about Mother Goose.

When I left that room I wanted a drink more than anything else in the world.

But I had something to do first.

The professor was working when I joined him. He sat at the table and covered sheet after sheet of paper with abtruse mathematical symbols. The floor was littered with discarded sheets each one of

which I would have to gather and destroy. He smiled at me and laid down his pencil.

"Ginney asleep?"

"Like a top." I lit a cigarette. "You've a fine girl there, professor."

"I know it, Tom." It was the first time that he had used my name. "I'm glad that she's taken to you." He stared down at his hands and sighed. "I'm really too old for her. Married late, you know, and missed the best part of life. I do my best but Ginney's young and needs young people around her." He sighed again. "It isn't easy."

I wasn't quite sure what he meant so didn't say anything.

"Funny," he poked at the heap of papers. "I feel as if I can really get down to it now. You know what all this is about?"

"No." I was deliberately casual and meant it. I didn't want to know. I could see that he wanted to talk but my job was to keep him working and he wasn't going to do that while I stayed. So I yawned, stretched, and made for the door.

I heard the rustle of paper as I closed it behind me.

Cottrell was waiting at the rendezvous. He didn't say anything as I got into the car but he had a bottle and I consoled myself as he drove to the edge of town. There he halted and, with the motor running, we talked.

"Any luck?"

"He's working," I said. I wasn't worried about leaving him alone. The entire area was lousy with Security men who would make sure that no one approached him but me. They must have had a hell of a job. Cottrell reached for the bottle, tilted it, then passed it back.

"How did you manage it?"

I told him and he nodded.

"Good. You've earned his trust and he'll be dependant on you. A little more and you'll have him jumping through hoops. Making friends with his delusion was a bright idea. Don't forget the sympathy angle."

I looked at him in the dash-lit darkness.

"You don't like me, do you?"

"I don't like what you're doing," he said harshly, and I caught the gleam of his eyes as he faced me. "I don't like what's being done to the professor. I'm a doctor of sorts, a doctor of the mind, and it's my job to heal. What would you think of a doctor who deliberately encouraged a malignant cancer in a man because it increased his I.Q.?"

"Doesn't that depend on what he does with his increased I.Q.?"

" Maybe." He seemed torn between the desire to talk and caution against talking too much. Desire won. " I'm sticking my neck out in saying this but I personally believe that the professor would be better off dead than the way he is. Oh, he's happy enough while he can retain his delusion, but what about when it ups and hits him in the face ? Anything can do it, a stranger, an incident, any one of a thousand things and he'll realise that he's been living in a dream. Then . . ." He made a gesture.

" The nut house ?" I nodded. " So what ? Would he be any the worse off ?"

" If you can't live with a thing," said Cottrell tightly, " you escape from it. The only way the professor can escape is by forgetting. The trouble is he can never forget enough. So he keeps on trying. They call it dementia praecox. It isn't nice."

" Then isn't it better to let him keep his illusion ?"

" Not if we want to save his mind." He looked away from me, his fingers drumming on the wheel. " Don't misunderstand me. With proper therapy he can be made to accept his loss and learn to live with it. He can be cured of his delusion and, mentally, he wouldn't be harmed. But that takes time, lots of time, and they won't give him the time. They want what he can do now. So they give him his dream until he's done the dirty work and then they'll drop him like a hot brick." He must have sensed my disbelief.

" Why not ? What better way to safeguard that knowledge than by letting the brain which discovered it lapse into total insanity ? What possible good could he be then to any foreign power ?"

" It's too dirty," I said. " We wouldn't do anything like that."

" No ?" He shrugged. " I've talked too much and you could get me canned if you wanted to. But I'm a psychologist and I know what makes men tick. One man wouldn't do it. A group of men would. Split responsibility. Avoidance of guilt. Add Security, fear, expediency, patriotism, the natural desire to take the easy path and the even more natural desire to be top dog, and the professor doesn't stand a chance. You'll see."

He engaged the gears and let in the clutch. He didn't speak on the way back and I had plenty of time to think. I did a lot of thinking too, not about what he had said, but about something quite different.

About Ginney.

It's funny how you can get used to a thing. Once you convince yourself that what you are doing is right then the rest seems to come automatically. Actors have a name for it. They call an actor who can really live the part a *darfstella*. Only such an actor doesn't really act

at all. If he's supposed to be an old man, then he is an old man. He walks like one, talks like one, even thinks like one. It makes for wonderful acting but it's hard on the nerves. To do what I had to do I had to believe in a ghost. So I believed in it. I got so that I could really see Ginney, sense when she was near me, consider her in everything I did. I accepted the professor's delusion and, in so doing, it became my own.

We stayed at the hotel ten days and the professor worked all the time. While he was working I took charge of Ginney and, once I forgot to remember that I was acting like a lunatic, it became easy. There were snags, of course. There was the time when I bought two ice cream cones, one for me and one for Ginney. I passed it to her and, naturally, it fell to the floor. It was a mistake and I was lucky that the professor wasn't with me. I wasn't so lucky the time we all went out to eat.

Maybe Security had fallen down or maybe it was just one of those things but the restaurant we chose was pretty busy and seats were at a premium. We had a table and three chairs, one for the professor, one for me and, of course, the other one for Ginney. We ordered, Ginney wasn't hungry so she just sat and watched, and while we were eating a man came up and started to sit down in the empty chair. I stopped him just in time.

"Sorry, mister, but that seat's taken."

"Is it." He looked at the empty place, then at the crowded floor, then back at the vacant seat. He was a big man, arrogant, and I could tell that he was going to argue. I rose and pulled him away just as he reached for the chair.

"I said that it's taken."

"In a pig's eye it is. Look, mister. I'm hungry and I'm going to eat." He reached for the back of the chair.

I thought of Cottrell and what he had said about the fragility of a delusion. I could have compromised. I could have asked Ginney to sit on my lap or done any of a dozen things to make the incident a logical outcome of a crowded restaurant. But I thought of the professor and how he would feel at seeing his little girl pushed around and I knew that I couldn't risk his beginning to ask himself questions. I pushed the man away.

It was a mistake. It was hot, he was bad tempered, and he didn't like being pushed. He swung at me, his fist driving low into my stomach, and I gagged as the air rushed out of my lungs. He grinned and drew back his fist to finish the job and I cursed my crippled leg as I tried to brace myself. It wasn't necessary. A waiter came rushing up, full of apologies, and caught the man by the arm. He didn't look strong but there must have been something in the way his fingers dug

against the nerves because the man winced and allowed himself to be led to a suddenly vacant table. Security, of course, but that didn't make me feel any better.

The professor was very quiet for the remainder of the meal.

"You know, Tom," he said over coffee and I was glad that he broke the silence, "the world is full of nasty people."

"That character?" I shrugged and lit a cigarette. "Forget him." I winked at Ginney, or rather I winked at the empty seat where she was supposed to be. The professor took no notice.

"Your leg," he said. "Pardon me if it's a delicate subject, but how did it happen?"

"Hit and run driver," I lied curtly. "I never did find out who it was."

"Yes," he said, and his knuckles went white as he gripped his cup. "That's what I mean. The world is full of murderers and criminals, people who would be better off dead. Sometimes I wish that something would happen so that they would all die."

I was surprised at the emotion in his voice. It was the first time I had ever seen him really angry, and he was, burning with that helpless kind of frustrated rage which makes you feel all sick and twisted inside. I tried to change the subject.

"Don't think about it, professor. It takes all kinds to make a world." I blew a smoke ring towards Ginney. "How's the work?"

"Finished," he said but he didn't sound like a man glad to have ended a chore. "You can have the final results to-night." He smiled at my expression. "That's what you want, isn't it? The last set of equations so that they can begin the tests for controllable fission of non-radioactive materials. Bigger and better bombs at a fraction of the price. The fools!"

"Please!" I'd begun to sweat. I couldn't know who was listening but one thing I was sure of. This was information which I wasn't supposed to know about. I didn't want to know about it either. I crushed out my cigarette. "Let's get out of here and go for a walk or something."

"Yes," he said and rose from the table. "I'll give you the papers and to-morrow we'll leave. Will you buy a car, I want to drive myself for a change."

I nodded and we left. It wasn't until after he had given me the wad of papers covered with their potential dynamite and I had passed them on to my contact that I began to get worried. Not about the information, that would be flown straight back to the laboratories where they were all ready to make the first tests. Not about the in-

cident in the restaurant. Not even about the fact that we were leaving in the morning. But about Ginney.

The professor seemed to have forgotten all about her.

We left the hotel the next morning in a cheap coupé guaranteed to fall apart after ten thousand miles. I wasn't worried. The car, like the professor, like me, like Ginney was expendable. As long as it did its job I couldn't complain. The professor drove, handling the wheel with a surprising skill, and I slumped in the seat behind him, my hat over my eyes and those eyes glancing from time to time at the rear-view mirror. Somewhere behind us, a spurt of dust on the horizon, Cottrell was still on the job. He would stay on it until he received word that the tests had proved satisfactory and then he would move in and take over.

I didn't like to think of what would happen then.

Once I'd satisfied myself that the professor could handle the car I relaxed and busied myself with thoughts. I was still worried by the professor's lack of attention to his little girl. For the first time since I had been with him he hadn't kissed her goodnight. He hadn't asked after her this morning, either, though I had made a point of settling her in the dicky seat with the baggage and asking her whether or not she was comfortable. But the professor had seemed to have something else on his mind.

Strange about a delusion. I'd known others who had their own private belief and, to me, it had always seemed that they had a trick of justifying or rationalising away anything which tended to shatter it. Cottrell had said that the professor was different. He had warned me that a word could shatter it and I wanted to discover why. The answer was surprisingly simple.

It was me.

My interference, my bolstering of the delusion, my own play-acting so as to make a fantasy a concrete reality. I had taken over as nurse-maid and, by so doing, I had relieved the professor of the need to adapt what wasn't to what was. I believed in Ginney, to me she was alive and so, to the professor, she was alive too. No need for him to convince himself any longer. He could sit back and watch me do all the little things he'd had to do and, naturally, just as a mother with a trusted nurse no longer worried about her child, so the professor had ceased to work at his delusion. Because, to him, it was nothing but the truth. I saw her, didn't I? I talked to her, played with her, protected her. So he had returned to work freed of his anxiety and left me with the burden. But if I let him down, if I showed him that I thought it was all stark lunacy and that I'd been acting with my tongue in my cheek in order to get him to work, then . . . ?

I straightened with a vague impression that something was wrong. I opened my eyes and something cold gripped my stomach as I stared at the speedometer. We were going fast, too fast, but I didn't realise just how much too fast until I stared at the scenery.

We were on a narrow road winding down the side of a succession of hills which, without any straining of the imagination, could have been called baby mountains. The road was bad and, to one side, it fell away towards the rocky bottom of a gorge. The car was slithering from side to side as the wheels strained to hold the loose surface of the road. Even as I watched we veered to the wrong side, sent dirt pluming over the edge, then drifted back towards the stony verge. And we were going faster all the time.

What I did then was dictated by instinct. I cut the ignition and hauled on the handbrake. I grabbed the wheel and jammed my foot against the gear lever so that it couldn't slip out. I hung on while the engine-compression helped to slow the car and, while I clung to the wheel, I prayed. We stopped three inches from eternity.

"You were going too fast," I said stupidly. "You might have killed both of us."

"I know," he said, and his face was dripping with perspiration. "I'm sorry."

I took over the wheel. He didn't argue about it and neither did I. He was shaken but not anywhere near as badly as I was and I had the crazy impression that he was disappointed about something. I drove slowly after that, handling the car like a matron on her first time out, and it wasn't until almost dark that we came to a village tucked away in the foothills. I stopped the car before an apology of an hotel and climbed stiffly from behind the wheel.

The proprietor was more dark than white but he made us welcome and the native cooking blended with the wine as good cooking should. After the meal the professor excused himself and went up to bed. I saw him into his room then went back downstairs and sat on the verandah, smoking, thinking, and waiting for Cottrell to catch up. Something must have delayed him because it was almost midnight before he arrived.

"What happened?" He was hot and tired and annoyed. "It's lucky I found you. You left the main road and buried yourself in these hills. I almost went over the edge twice following your trail."

"I know." I told him what had happened and his face went white.

"Are you sure?"

"You think that I could ever forget?" I dropped my cigarette and lit another. A moth, a wide-winged thing came fluttering towards the

match and I knocked it away. " I tell you he almost killed both of us. Hell ! If I hadn't grabbed the wheel we'd have both been mincemeat."

" And after you stopped the car, what then ?"

" I told him he was driving too fast and took over."

" Anything else ?" He glared his impatience. " Did you say anything, do anything ?"

I frowned, trying to remember. " No. I said that he was driving too fast and could have killed the both of us. He agreed and apologised. I . . ." I stopped, staring at his expression. " What's the matter ?"

" Both of us," he repeated sickly. " *Both* of us !"

And then it hit me right smack in the face. I'd totally ignored Ginney—and so had the professor.

" The death wish," said Cottrell. " He wanted to die but has the normal indoctrination against conscious suicide. Subconsciously he tried to commit self-destruction by driving so fast down that trail that an accident was certain. You stopped him just in time. But why should he want to die ? Why ?" He frowned as he thought about it. " Did you do anything, say anything, to shatter his delusion ?"

" Not that I know of." I told him of the incident in the restaurant. " It's a funny thing though, he didn't seem to pay any attention to Ginney afterwards. I thought that it was because he'd left it to me."

" Maybe, or it could be that something reminded him that she was dead." He looked even more worried. " He gave you the finished work after that, didn't he ?"

" Yes." I stared at the tip of my cigarette and felt as guilty as hell. Because I'd remembered something. I'd remembered the way he looked when I'd lied about my accident. If he liked me, and I was sure that he did, then that was just one more black mark against humanity. Or the coincidence may have reminded him of what had happened to Ginney. " Is it important ?"

" I don't know. It's too late now anyway, the papers have arrived by now and they'll be hard at work making the tests." Cottrell seemed more worried than ever. " I don't like it. I don't like the way he tried to kill himself." He rose to his feet. " I want to see the professor."

It was very quiet upstairs. The proprietor had gone to bed like an honest man and we seemed to be the only living things in the entire world. I led the way, favouring my bad leg, and striking matches to guide Cottrell. We heard the voice just as I opened the door of the professor's room. Cottrell gripped my arm just as I was about to call out and we stood there, alone in the darkness, listening.

" Ginney . . . Ginney . . . Ginney." A mutter and a restless movement on the bed. ". . . with you soon darling. We'll all be

with you soon . . . me . . . mummy . . . Tom . . . you like Tom, don't you ?" I started to say something and then changed my mind. ". . . world's rotten, darling. Murderers . . . criminals . . . fools . . . all rotten. Better dead . . . all dead . . . all the same . . . all together . . ."

I stepped forward and almost cried out at the pain in my arm. Cottrell gripped me without knowing what he was doing, and, after I had pulled him back into the passage and lit a match, I could see his face ghastly white and shining with sweat. He didn't speak until we were back downstairs and even then he said nothing until he'd burned his throat with straight tequila.

" You can't fool the subconscious," he said grimly. " You can fool the conscious but that's all. He," a jerk of the thumb told me who he meant, " knows that Ginney is dead. He tried to deny that knowledge and we, God help us, helped him do it. But deep down inside he knew that she had gone for good." He must have seen my expression and remembered that I was no psychologist.

" The professor is an intelligent man," he explained. " To remain intelligent his mind had to be efficient, and how efficient is a mind clouded with delusion ? You took from him the need of maintaining that delusion and so he could finish his work. But, once you had done that, he had time to be objective. He could see you as others saw him and, somehow, he must have realised the futility of trying to ressurect the past." He sighed. " In other words he was on the road to a cure. But there was something else. They never found out who killed his daughter and he wanted revenge. They never found out, so you said, who injured you, and you are his friend. He wants to be with his daughter and the only way he can do that is to die. But he can't commit conscious suicide. Conflict, Tom ! Conflict leading to insanity and the desperate need to find an escape from opposed problems. And that is the man who worked out the means to create fission in non-radioactive materials !"

I'm not stupid and I don't need a drawing but just now I wish I was a moron, or a moth, or something brainless and untormented with thoughts of what-might-be. Cottrell has gone, driving like a madman over those rutted trails, but he knows and I know that he can't possibly be in time. So I sit here, smoking, thinking, listening to the crickets and waiting for the dawn.

Maybe Cottrell is all wrong and the professor worked out a safe formula. Or maybe Cottrell is right and the professor wants the world to go up in flame so that he can pay out the killer of his daughter and, at the same time, be with her in the only way he can.

E. C. Tubb

Gilbert Nash, mysterious investigator whom the U.S. Government would like to know more about, discovers that there are now two reasons why he should find Hodgkins' widow—both having a direct bearing on his own obscure past and upon certain steps he must take in the future.

THE TIME MASTERS

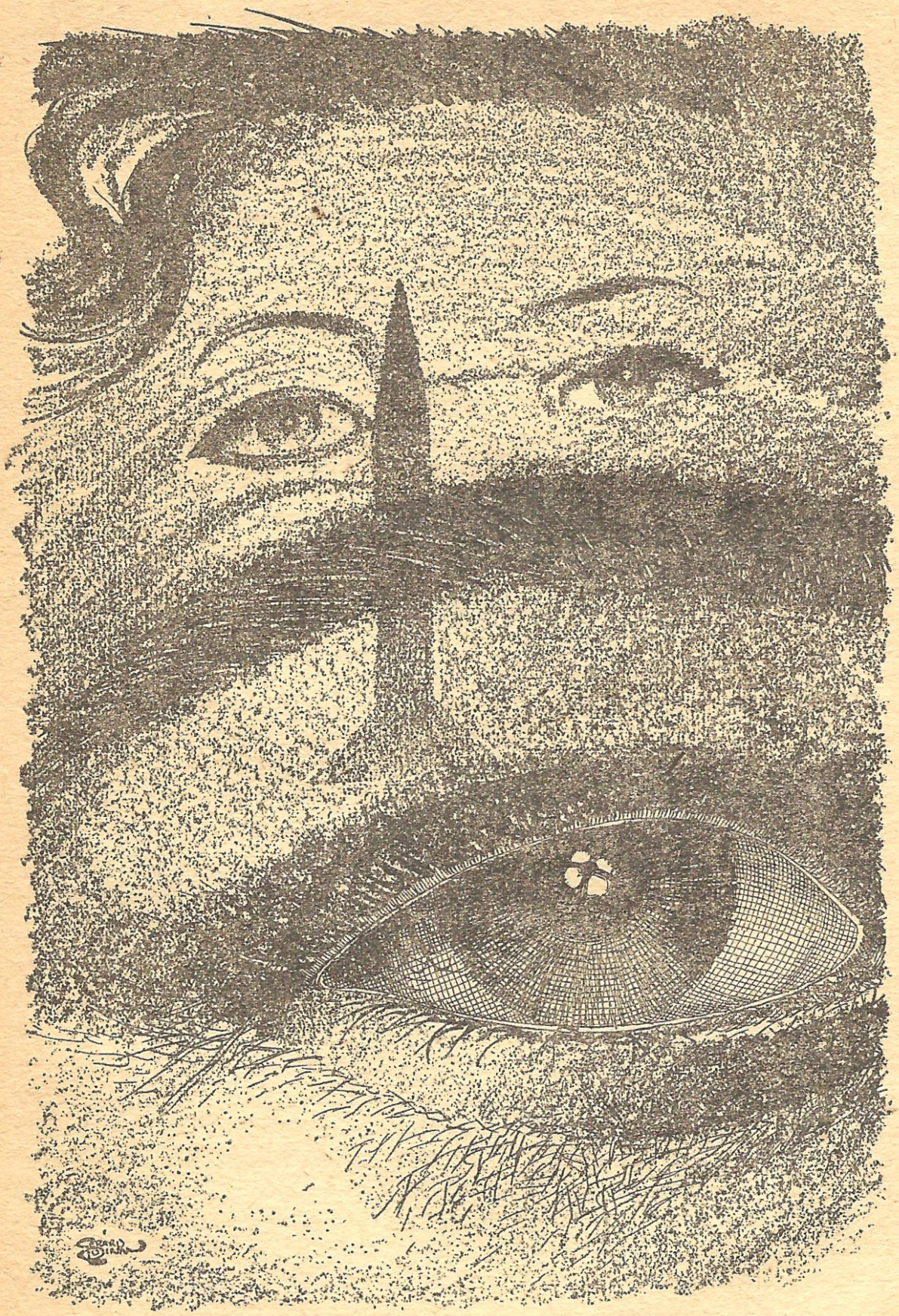
By Wilson Tucker

Illustrated by QUINN

Part Two of Three Parts

FOREWORD

To the secret agents working direct from Washington, Gilbert Nash was something more than an enigma. No amount of investigating and back-checking could uncover anything about him prior to March 8th, 1940 *which coincidentally was the date the American National Defence Research Committee was set up. Dikty and his supervisor Cummings, members of the secret security police, had followed Nash's back-trail to that date when he first appeared in Miami, but could uncover no further evidence of where he had come from. A number of isolated incidents apparently gave them the information that Nash knew far more about the nation's secrets than any ordinary individual should. Was it coincidence, for instance, that found Nash installed ostensibly as a private detective in the city of Knoxville, Tennessee, only a short distance from the Government's experimental atomic plant at Oak Ridge? The fact that Nash had actually been in residence in Knoxville* before *Oak Ridge was started didn't help*



matters—it seemed that he had expected the research station to be built at that spot! Certain other facts are also highly suspicious—the fact that Nash has odd 'foreign' characteristics and apparently subscribes to all scientific journals and bulletins make Dikty and Cummings the more determined to unravel the mystery.

Meanwhile, in his office as a private detective, Nash receives a visitor, Gregg Hodgkins, one of the Oak Ridge scientists, whose wife has disappeared. Hodgkins wants Nash's assistance in tracing her and infers that Carolyn has probably obtained some vital secrets from himself. Nash, by some astute deduction, reasons that they might concern either a spaceship or a new fuel vital to such a project. He decides to take the case.

Details of this meeting between Nash and Hodgkins reach Dikty who also discovers that after leaving Nash's office Hodgkins had made several unsuccessful attempts to purchase a gun. That night Hodgkins is found dead at his home, shot through the head, apparently a suicide, but Dikty inclines towards a murder theory. He discusses these points with Cumming's secretary Shirley Hoffman and learns that another operator is now being assigned to the office to assist them in the deepening mystery.

Twenty-four hours after Hodgkins' death Nash waits in the rainswept darkness outside the deceased's house for the neighbourhood to settle down for the night. When the last light is extinguished he forces an entry and begins a careful investigation of Hodgkins' former residence but finds little that may be of help. Sitting in the dark mentally running over the numerous points concerning the dead man he suddenly hears cautious footsteps creeping across the kitchen floor; a small light flashes across the bedroom door and the intruder enters and begins rummaging around only to emerge into the living room after a long and thoughtful pause. The pleasant odour of her perfume arrived with her. Before she could see him and be unduly frightened he spoke quietly.

VI.

Her gasp was almost a scream, half smothered and quickly choked off as she remembered where she was. Again her light stabbed out, spotlighting him in the chair.

"Better put that out," he advised her. "Neighbours might see it."

The light stayed on him a moment or two longer and blinked off. He could not see her at all in the new blackness, and knew that she could see him but dimly.

"What are you doing here?" she demanded in fright.

"Meditating."

She had no ready answer.

"There isn't much to be found," he continued in a conversational tone, striving to put her at ease. "I imagine the police have removed most of it."

She sucked in her breath and started again. "I want to know what you are doing here!" The voice was small and strained, still frightened at discovering him.

"Don't you believe that I would come here to meditate? The house was fairly quiet, until you came barging in. You aren't very accomplished at housebreaking, you know—much too noisy." He listened to her rapid breathing in the darkness. "Oh, all right, I'm here for the same reason you are. Loot."

"I'm not looting!" she shot back.

"Searching, then."

"Searching for what?" she demanded instantly.

"Anything," he told her calmly. "Anything at all that may prove useful."

"Useful? To whom?"

"To myself."

She hesitated. "What is your interest in . . . ?"

"Come now, let's not be naîve as well as noisy."

She said nothing to that, standing across the room and peering at him. Nash locked his fingers in his lap, his eyes becoming used to the darkness again and pinpointing her. She remained only a dim figure against the far wall. "I notice," he said casually, "that you haven't asked my name, who I am. You must know me."

"I've seen you," was the grudging admission.

"How nice." He smiled. "And may I see you?"

"No! Don't move."

"But why not? I'm quite sure you are an attractive woman; you have an attractive voice, and I like the perfume."

"Never mind that." A measure of self-control was returning to her voice.

"But I do mind that. I'm fond of women."

"I still want to know what you are doing here!"

"But I've already told you the truth, believe me. I was searching the place, as you have."

"In that chair?" she asked derisively.

"I had come to the end of my search—as empty-handed as you. And so I sat down to meditate."

"What were you meditating?"

He laughed. "I'm sorry, dear mysterious girl. My thoughts are my own, free and untaxed. You are the most inquisitive person I've met in a long time. Please tell me who you are?"

"No."

"Very well. I'll find out for myself."

There was a catch to her breath. "How . . . ?"

"I'll remember your voice, your perfume," he said chidingly. "I'll remember the way you walk. But I shall always remember your voice, even when it has lost its overtones of fright." He laughed again. "I'd like to become better acquainted with the voice. Oh, I'll find you."

"And then?" she asked.

He smiled to himself in the darkness; she really wanted to hear the answer. "It depends upon the time, and the place. I may buy you a drink or a dinner, may ask you to dance or come in and see my butterfly collection. Or I may ask you to remove your hat because you're obstructing the picture. We'll meet," he promised.

"Did—" She paused to rephrase the question. "Didn't you find anything? There is nothing in the house?"

"I found a hairpin," he acknowledged. "I have it here in my pocket. If you'd like one there are more in the vanity drawer."

She was obviously astonished. "What in the world do you want with a hairpin?"

"Oh—keep it. Perhaps try to match it to those you wear in your hair when I find you again, perhaps put it away as a sentimental bit of nothing. I don't know." He peered at her dim figure, wishing he could see her face more clearly. "I may even twist it out of shape—say fashion it into the horns of a bull, hold it over a flame." He was suddenly tense, awaiting her reaction.

The room was enveloped in silence with the two people regarding one another as duelists, each struggling to see the other better in the almost nonexistent light. The rain was a background of continual sound to their duel.

Her question was a taut whisper. "*Who are you?*"

"Not at all what I seem," he answered cheerfully, now suddenly relaxed. "And if I may suggest, much like you in that respect."

"But who are you?" she repeated insistently.

"Gilbert Nash," Gilbert Nash said. "Hours from nine until four." He glanced around the darkened room. "Special hours of meditation by appointment."

"Stop being silly. You know what I mean!"

Nash shrugged, forgetting she could not see him. "You wouldn't tell me your name. So . . ."

She said slowly, "I could make you tell."

He peered at her, amused. "I doubt it."

"Hodgkins visited you, didn't he? In your office?"

" Yes, he did. And don't bother asking the next question because I won't tell you the answer."

Again she said, slowly and suggestively, " I could make you tell me."

Nash dryly repeated his doubt, and added as an afterthought, " I'm not like Hodgkins."

There was a tight moment of silence before she continued. " I wasn't thinking of using force."

" I know very well what you were thinking," Nash told her, striving to conceal the sudden amusement in his voice. " And again I say, I'm not Hodgkins."

" You seem so damned sure of yourself !"

" And you," he countered, " like so many women, seem to believe that one thing will open all doors."

" I think I could *hate* you."

" It's only a surface thought, dear girl. It'll melt away with time; I'm really a lovable character. You can't afford to hate me—not in your present position. But go home and have a good cry if it will help." He sat up in the chair and stretched. " I suggest we both go home—we've been here far too long. The neighbours may have seen your light or a prowl car may stop by on a routine check. Neither of us wants to be found here." He made as if to rise.

" Don't move," she warned quickly.

" All right," he agreed, " not until after you leave. But please start leaving, will you ? I've lived too long to want to be shot now." He put out a hand. " Shake hands before you go—bosom buddies and all that ?"

" *No* !"

She slowly edged along the wall, inching her way toward the kitchen door. Nash remained seated, following her cautious movements with a speculative gleam. The girl backed up to the door and fumbled with the door-knob; it swung open but she hesitated a moment, one hand on the knob.

" I'll find you," Nash called after her.

She was gone, leaving the door hanging open.

Nash left his chair and leaped across the silent room, dropping to one knee and focusing his light on the spot where she had stood for so long. A trace of dampness, of mud, but no clear impression. He moved on into the kitchen and knelt again at the door, studying the frightened woman's muddy prints on the linoleum. They were slurred and indistinct, much like his own near by. He extinguished the light to stare through the open doorway at the rain.

" That certainly wasn't Carolyn Hodgkins," he said with satisfaction.

Gregg Hodgkins's funeral the following afternoon was a small, poorly attended affair for a man who had accomplished so much, for a man who had helped hurl at least three tiny ships into space. The stonecutter was still censored.

Clustered together in a corner of the mortuary parlour were a knot of men who had known him and worked with him at Oak Ridge; his co-leader on the recent project, a group of others who had contributed their bit, the psychiatrist, and perhaps one or two others from the front office who attended because they felt it their duty—not because they had known the deceased. Scarcely a dozen in all. So much for fame, for a genuine contribution to human progress.

There was still another man who sat apart and continually glanced at his watch—Hodgkins's doctor, Nash guessed. And there were two men who kept themselves carefully separated from each other, who tried to act as though they didn't know the other. These two men constantly eyed every other person in the room, speculating, weighing, examining. Independently they swung around to stare at Nash as he walked in. They might as well have worn blue uniforms.

There was one other person in the room—a young woman. She sat quietly still, listening to the sermon.

Nash deliberately seated himself near her, choosing a chair slightly behind hers that he might study her much the same as the two policemen were now studying him. She did not match the description of Carolyn Hodgkins that the husband had furnished, certainly did not appear to be the forty-one that Carolyn was " by agreement," nor was she someone who could pass as ten years younger—someone who hadn't grown much older " than the day they were married." This woman had not yet reached thirty. The hair was of a different colour, the height was not the same, nor the approximate weight. He could not see her face clearly and had not seen the eyes at all; she hadn't turned around when he entered the room, hadn't turned when he sat down behind her. She *was* aware of him. He knew that by the sudden rigidity of her body, by the way she held her head and kept her attention on the minister. But this was not Carolyn Hodgkins.

Who then ? What other woman had an interest in Gregg Hodgkins, living or dead ?

Near the end of the sermon, Nash both felt and heard someone else come into the room. Someone who took a chair near the door. It seemed to be a man, judging by the heaviness with which he seated himself, and after a few moments Nash copied the plain-clothes men by turning to look.

The government man, Dikty was staring at him.

Nash gave him the briefest of nods, which was as briefly returned, and then both of them returned their attention to the funeral proceedings. Nash contented himself by staring at the back of the girl's neck, waiting for the long sermon to come to an end.

Afterward he stood outside the mortuary, waiting in the half-cloudy sunshine for the girl to pass by. A group of silent Oak Ridge men came out and moved down the sidewalk. Then the two plain-clothes men emerged from the door, fixed him with twin stares, and purposefully approached him. He instantly guessed that Dikty had sent them. Dikty himself appeared in the door after a few moments and stayed there, pretending not to notice him or the policemen.

"Nash?" one of the men asked.

"Yes."

"We sort of wondered why you came down?"

"Hodgkins? Well—he was my client, for a time."

"How long a time?"

"Something like ten or twelve hours." Nash studied their faces, seeking a hint as to their intentions.

"What did he want with you?"

"Asked me to locate his wife."

"That all?" the policeman asked suspiciously.

"That's all."

"It wasn't nothing to do with his job?"

"Absolutely not." Nash was emphatic.

"We could take you in for questioning you know."

Nash nodded. "Yes, you could."

"We could have your license."

"Yes, you could do that too."

The two policemen were studying him now. "It don't seem to worry you none."

"Friend, it doesn't bother me at all. I have a clean record, and nothing has passed between Hodgkins and myself that you could hang a complaint on. Still—I know that you could revoke the license on some excuse or other, if you decide to. But it's not very important."

"Whaddya mean by that crack? Without a license you can't do business."

"I haven't had enough business in the last year to fill a thimble; do with the license as you please. I don't have much use for it any more."

The second man spoke up with a new suspicion. "Are you thinking of moving?"

"I had considered it—yes."

"Where to?"

"I don't know. North, south, east, west—I don't know." He smiled blandly at the pair. "There isn't much for me to do in Knoxville any more."

The pair of officers lapsed into impatient silence, waiting for further questions to suggest themselves. Nash looked over their shoulders as the mortuary door opened again and the girl stepped out into the warm sunlight. She stopped just past the door to glance at Dikty, and then down the walk to where he waited with the police. Her eyes widened.

They were soft, dark brown eyes he noticed, almost the colour of her smoothly brushed hair. Beside her, Dikty had turned his head to sniff curiously. The girl hesitated there but a second longer and then advanced along the walk, alone. Nash was sure that Dikty had whispered to her, had sent her away from him. She passed by the silent trio and continued up the street.

Nash smiled after her.

That would be Dikty's secretary, Shirley Hoffman. Shirley Hoffman was wearing a new perfume. Dikty had noted it and absently turned to sample the scent. Shirley Hoffman had recognized him standing there with the plain-clothes men and he had recognized her. She had changed perfumes but she wouldn't be able to change her voice.

Shirley Hoffman had been easy to find again.

VII.

The hotels were blanks.

The police had long since covered them all searching for Carolyn Hodgkins, and perhaps Dikty had visited them as well. Even a drastic change in the colouring of her hair as well as a change in name would not have concealed her, for the police would have examined the registers for those days immediately following her disappearance, would have carefully scrutinized each newcomer. And she could not alter the colour of her eyes. The police would have likewise visited the bus and railway stations with her description, with the picture taken from the dressertop. Despite that, there remained the definite possibility she had slipped out of town without being seen. Carolyn Hodgkins was no bungling amateur.

Nash clasped his fingers beneath his chin, propped his elbows on the desk and considered her problem.

There were not too many places she *could* go that would be profitable to her; only Oak Ridge, Hanford, perhaps Brookhaven and the Savannah River. That last brought a frown of speculation. Savannah

River was processing heavy water. Carolyn Hodgkins might well go there. Or consider Los Alamos; Los Alamos might serve if she could sufficiently camouflage her real intentions, could present an acceptable reason for moving there. She just might meet another technician there who would serve her purpose, but her chances of marrying him were practically nil. Hodgkins's widow was a marked woman now, marked because she was a widow. Let even the suggestion of marriage be broached in the proper circles and Los Alamos would trace the wife-to-be back through Oak Ridge and Knoxville all the way to that other marriage before the war—that romantic meeting in the public library. She wouldn't want that, couldn't afford that. So Carolyn would not suggest marriage. The technician would be entertained without it.

Lucky fellow, he would think. Nash smiled faintly. Carolyn had her points.

And she was interested in the same object as he, but with a vastly different end in view. In all likelihood that object would be fired from White Sands or perhaps Frenchman's Flats; it and similar objects would go pounding up into the sky, some to fall back failures, some to vanish forever beyond sight and sound. Those three experimental craft that had already done so were but pilots to the pilots—the real pilots were yet to come, powered with the nuclear magic Hodgkins had almost given his sanity for, that space-happy young men would undoubtedly give their lives for. And hard on the heels of those genuine pilot models would be the ship Carolyn waited for. There was even the remote possibility that one of the early pilot ships would serve her purpose. Already, he knew, mice and monkeys and even a goat had been thrown into space at White Sands. Some human would go soon. *That* could be the ship Carolyn waited for. Risky—but she was now at that point where she was more than willing to run risks. She didn't want to die.

And that was the fine thread of distinction between Carolyn and himself. She was determined to live, to return from whence she came. But he had decided to accept death on earth as it would come to him.

It wasn't likely then that she had gone to Hanford or Brookhaven. Those particular places were too much out of the way, too far off the mainstream of investigation and experimentation. Sometime during her marriage to Gregg Hodgkins she had known that Oak Ridge was the prime mover of those ships-to-come, and she had clung to him and to the place as long as she dared. She had eagerly helped whenever and wherever possible, hastening the day. Hadn't Hodgkins admitted to something like it? Yes—something to the effect that she would drop hints in casual conversation and he reassigned the values

to apply them to the problem at hand. That had been it. She was no technician or even a mechanic in her own right, but she knew enough to serve as a guidepost. It may have been that Carolyn had known her husband's fount of intelligence and reasoning powers far better than he, had plumbed and brought to the surface of his mind those answers he wouldn't otherwise have discovered for a longer time. She was impatient, desperate for the ship and the power.

That was the most likely answer, for Carolyn had never been technically minded. She couldn't have sparked or built Hodgkins's nuclear thrust herself, couldn't so much as design a vessel to contain it. So she had primed him from his own well of knowledge, hurrying him on. What would the front-office boys at Oak Ridge have thought of that?

Suddenly, Nash wondered just how many different projects Hodgkins *had* worked on during his career?

Had he a finger in fashioning the bomb itself—diligently pushed on by his wife? Very possible. She knew only too well that no decent durable ship could go hurtling into the vacuous sky without nuclear energy behind it—the liquid fuels simply weren't enough. And to obtain energy of that type for vehicles of that kind, the military demand had to come first. First had to come the explosive in destructive, warlike forms—any primitive government would insist on that. Next would come the by-products of medicine and manufacturing. And finally, if there existed an outside threat, would come the vehicles capable of conquering space. That was the pattern of human thinking and Carolyn was aware of it.

Powder rockets were confined to the toys, to early warfare, to amateur experimentation; the best of the powders couldn't propel a ship beyond ten thousand feet per second, and the fuel was burned in a breath. The various liquid combinations were only a little better, a bolsterer of hopes: kerosene and oxygen, gasoline, acetylene, even hydrogen and oxygen were but toddling steps, each step pushing the other awkwardly up to the frontier. But they were not able to bring the ship back again. The lost *Corporal* had used the last liquid refinement; those others had used something else. Nuclear energy was the only answer, and Carolyn knew it. So Carolyn had hastened the day.

It followed that Carolyn would continue to haunt Oak Ridge or Los Alamos, awaiting the final day. With side trips to Savannah River, perhaps.

He decided to concentrate on Knoxville as the most likely place; let someone else search Los Alamos, someone with proper entry and contact, someone like Dikty or his supervisor.

If she remained here she would need housing; the hotels would be closed to her for purposes of secrecy after her husband's death—she would realize that. Likewise she would know—or guess—that someone would eventually get around to checking the real estate offices, searching for an apartment or house she may have rented after leaving that one hotel. And in Knoxville, apartments or houses weren't picked up in a day. What was it her husband had said ? She began mentally packing and preparing to leave him several weeks prior to the date she actually walked out. Not only mentally packing, Nash decided. She had started moving, not a difficult thing to do when all she wanted or took were some of the contents of her bedroom.

Her closet space was empty, the vanity drawers empty. All the possessions she took with her could be packed into a trunk, and perhaps a suitcase on the side. And she had thoughtfully secured a place to move *to* long before the day she deserted her husband, so many months before that a routine check today would reveal nothing suspicious. *Sudden thought*: to the home of that hypothetical third party ?

To move that trunk she would have hired a taxi or a small delivery truck. She would avoid the risk of having a third party call for her, having him seen by neighbours. If that third party existed, both he and Carolyn would go to the extreme to conceal his existence.

Nash unlocked his fingers, stood up, stretched.

The afternoon hour was growing late and dusk would not be long in coming. A few short hours ago Hodgkins had made his last public appearance; since the services Nash had done nothing but lounge in his office, brooding. Now he put on his coat, closed the window, tested the door latch with his thumb and stepped out into the corridor.

Knoxville's streets were full with homebound crowds.

Gilbert Nash selected a near-by restaurant, preferring to eat downtown because he thought it too early to go home, too early to separate himself from the noisy company of people. After a short wait in the closely packed place, he was given a small booth in the back, and ordered a beer to pass the time until the meal would be ready. Idly, he scanned the people surging about the room.

Shirley Hoffman entered the door, made a small face when she discovered the waiting line and hopelessly searched for a vacant table. She saw Nash a moment later and her eyes widened involuntarily, as they had done earlier that afternoon. She made a tentative move as if to leave.

Nash was on his feet in an instant, inviting her to join him with a gesture and a welcoming smile. She stepped out of the line, paused to express doubt with a frown, and then slowly threaded her way

among the tables to where he waited. Her face still wore a hint of indecision.

His smile dissolved into a wide grin. "If it's that bad, go away. I'll withdraw the invitation."

"No, please." She apologized and slid into the seat opposite him. "Really, it isn't what you must be thinking at all. But—"

"But what? Out with it."

"You *must* think I followed you here. I did catch a glimpse of you on the street a moment ago, but I didn't follow you. I often eat here."

"Glad to know it," Nash assured her, "and I'll come back again." He continued to grin across the table at her, to put her at ease. "But tell me just one thing and I'll answer your doubts. You recognized me this afternoon?"

"Yes."

"I thought so. I'm pleased to meet you. My name is Gilbert Nash and yours is Shirley Hoffman."

"How did you . . . ?" She stopped and fought away a blush of confusion, her eyes avoiding his. "I suppose it *is* rather silly to pretend we don't know each other."

"Is, yes. And I like the sound of your voice."

Her glance flew back to his, startled and wondering.

Nash was still grinning almost laughing at her. "Dikty betrayed you, there in the doorway. He didn't recognize the new perfume you're wearing. I like it though." He waited a moment to reassure her. "I told you I'd find you again."

Her answering words rushed out hotly. "And now I suppose you're going to ask me what I was doing there!"

"No—I'm not. I know we were both there for the same reason: information. And I know that we both gained the same amount: nothing. You came away with just one thing I did not, and vice versa."

She waited for him to continue, not speaking.

He flicked a casual finger at her purse on the table. "You have a key. I have a hairpin." And then suddenly he grinned again. "But I knew you didn't have a gun last night. I only pretended you had one."

Hoffman bit her lip, cautiously watching him, and then quickly laughed. "So did I."

The waitress stopped at their table.

"I'm having a steak—want a beer while you're waiting?"

"Yes to both," she answered. "Gilbert Nash, you're a most curious man. I've never met anyone quite like you."

"That," he replied dryly, "is the opening gambit to a hundred thousand flatteries, coming from anyone else I'd call it a hundred thousand and one. But you, you can't help yourself. Dikty's job rubs off on you."

"Oh, now, I didn't intend—"

"I know you didn't, so don't apologize. And I don't mind in the least. Dikty and I have been keeping our weather eyes on each other for a long time. Amusing, eh?"

"I'm sorry," she said sincerely, "but we may as well be frank about this, don't you think?"

"Do, yes. There's no point at all in going along and pretending that he isn't watching me, every move I make. He'll have a report on this meal before morning." Nash chuckled. "But I don't believe *he* could sit down with me like this and enjoy dinner; he's too much the formal, hidebound Sherlock." He glanced across the table at her, amusement in tone and gesture. "I think you can."

"I think so, too. And how are you, Mr. Nash?"

"Splendid, Miss Hoffman."

"You sent me to the library this morning."

"I did? That's curious—it must have been something I said. Probably last night."

She nodded. "It was. You were speaking of hairpins. You said, you may fashion it into the horns of a bull and hold it over a flame. I wondered what you meant by that."

"Yes, I remember it now. That was in the nature of a spark. If you had been who I first thought you were, last night, that would have started a fire."

"Really?" She stared at him with round curious eyes. "You must have been expecting Mrs. Hodgkins?"

He nodded and sipped at the beer.

"How would *that* have started a fire? I mean—what does it mean? I couldn't find a thing at the library to offer a hint; I must have driven the poor librarian crazy. We searched the black magic and voodoo shelves from one end to the other. You see, I thought you might be a male witch. But there was nothing concerning the horns of a bull."

Nash laughed gaily, causing some of the nearer diners to turn and look. "Wrong department of research. Next time try archeology—and in particular the Middle East and the Mediterranean. Bulls were employed as sacrifices, as ornaments, and as strange partners in erotic dances in ancient Crete; the customs and habits occasionally spilled over into the surrounding states." He whooped again. "Male witch!"

"And you were there!" she retorted flippantly.

" I've been there," Nash answered.

" Oh ? Teacher, archeologist ?"

" Let's say as a student, an ambulant armchair archeologist, but I did go over the ground. Never had the opportunity to actually participate in the digging, but I would have liked to. One of my many hobbies—I enjoy studying anything having to do with people. I have a fair-sized collection of books on the subject and some few artifacts; I enjoy comparing the volumes against each other, pairing off the learned scholars in opinionated battle. Consider those Cretan bulls for example. One authority would have us believe they were sacrifices to a god and that youths would perform ritual dances around them as they were led away—a sort of farewell party. But another scholar will stoutly maintain that the youths were sacrifices to the bull —they were dancing and cavorting about before meeting their deaths. Can you imagine cavorting with joy at your own funeral ? But still another will say it was nothing more than an acrobatic act, a skilled performance for an audience, similar to modern bullfighting.

" One can't blame these writers too much—they have so little to go on. *This* particular incident is based on a few paintings and carved rings uncovered at the sites. And modern man, if you need reminding, is apt to interpret things and events according to modern reasoning and logic, still believing he is following the logic of antiquity."

" But which is right ?" Hoffman asked curiously.

" None, really. At least in ancient Crete. Our scholars readily realized that the dancers were of both sexes, and always young and fair. But our scholars are cursed with modern minds. They weren't so quick to realize—or at least admit—that the affairs were purely erotic in nature. Performed for an audience. That's rather foreign to present-day thinking. So the archeologists lean to the sacrificial explanation, although I'll admit their thinking is coloured by other finds. In later times the dances spilled over into the other Aegean islands and degenerated into brawls and senseless murder." He caught her sudden expression. " You think my choice of words poor, or is it my sense of values ? You could be right, whichever; I don't always manage to keep pace with changing values. But I do think the original purpose of the rites were lofty, compared to the blood lusts that followed. The morals of one age are not those of the next."

She was silent, considering all that he had said while the waitress prepared the table. She hoped her thoughts weren't too apparent on her face. When they were alone again she closed one eye and fixed him with a semi-serious glance. " You sound as though you *were* there."

"A healthy imagination," he answered dryly, "plus an undying curiosity about all things human from the time your Paleolithic ancestors first began piling one stone atop another to build a wall, up to and including the ships that leap into the sky—yesterday, today and tomorrow. I want to know where man came from, what he has been doing all these years, and where he is going. Especially where he is going."

"My favourite grandmother," she interposed, "used to say we were going to hell in a bucket."

"In one language or another, they've said that for five thousand years. Don't believe it."

"I know a man," she copied his dry tone, "who is interested in your interests."

"Good! Send him around someday and we'll have a first-rate bull session—no pun intended. I'll do my best to amuse him. Does he have an interest in archeology? Is he a religious man? Maybe he'd like to hear about the religious uproar in Europe when an indiscreet Englishman found evidence of a tremendous deluge."

"I rather doubt it," Hoffman shook her head, the brown hair swirling. "His interests run along other lines. But I'll listen."

"You can't very well help yourself!" Nash plunked down the beer bottle on the tabletop. "The steaks aren't ready and you're trapped. More beer? You don't mind if I do? Thanks. Well . . . our Englishman was evacuating in Mesopotamia, delving into Assyrian and Babylonian history for traces of a still earlier people who had handed down to them a form of writing. Did you know that the source of the world's first form of writing is still unknown?"

"I'm not very bright. What about the Englishman?"

"Still digging—he made several finds on the site, finds of immense scientific value and of course much gold. It's a curious thing, but do you know, you humans worship gold above knowledge? Without exception, every archeologist I've heard or read of has discovered gold in his graves and excavations, and has attached as much or more importance to that than the artifacts he found there. Let one of them make a report of a new find, and at the very beginning of that report he will give a description of the gold leaves, gold headdresses, gold this or gold that he uncovered. I think that curious."

He paused to see if she even remotely agreed with him.

"The deluge," Hoffman reminded him.

"To be sure—the deluge. Well, there he was, this Englishman, spading around and turning up first one thing and another, until finally he chanced upon a mass grave of royalty and servants. The ladies in waiting, the soldiers, the slaves, all murdered at the graveside

and unceremoniously dumped in with their masters. That was highly unusual at that particular place and time, so the Englishman dug deeper. Beneath the mass grave he discovered a layer of thick yellow clay some eight feet through, and below *that*, still other remains of humans and buildings. So there you are."

"So there I am not!" she contradicted him. "What is it all about?"

Nash seemed mildly surprised. "The eight-foot layer of clay," he said matter of factly, "deposited by an immense flood, accompanied by high winds and rivers running out of their banks. Forty days and forty nights of rain, one hundred and fifty days before the waters receded—all that left an eight-foot deposit in the valley between the Tigris and the Euphrates. The Biblical flood, pretty well pinned down. Human remains above the clay as well as below it. Our Englishman finished the work of two other Englishmen before him and left the religious world in something of a turmoil. They didn't quite appreciate the show."

"Now you're running in more Englishmen on me." she complained. "You aren't fair!"

"But haven't you heard of the Gilgamesh Epic?"

"Gilgamesh?" she repeated. "No."

Nash shook his head, sadly reproving her. "Modern woman, tch, tch."

"Oh, tch, tch, my eye! All right, I'm thoroughly trapped now. Tell me about the other two Englishmen and the Gilgamesh Epic. Will this be a short story?"

"Sort of. I'll condense it. These other two Englishmen came before the one we just finished off. The *first* one found and shipped home to England several tablets dug out of a buried palace. The *second* Englishman then spent several years and all but wrecked his health in translating those tablets, seeking to confirm certain theories proposed by the man before him. His translation rocked the staid Victorians and created the hubbub. The poor fellow was not fully vindicated until our *third* Englishman happened along some years later and discovered that bed of clay beneath the mass grave and the palaces."

Hoffman nodded brightly. "The point is slowly becoming clear. The translator found a Biblical story on the stone tablets."

Nash regarded her with speculation. "No. He found what was supposed to be a work of pure fiction."

"Supposed to be?"

He nodded, smiling faintly. "A poem of epic proportions. The tablets had been taken from an ancient king's library, you must understand, along with many others of a more common nature. Those

others contained the usual factual data and were more or less expected: histories, genealogical studies, accounts of wars, of great personages, of prisoners and booty taken, some crude geographical surveys—everything a king might desire to make his library a storehouse of knowledge and of course a testimony to his own greatness. Now comes the square peg for the round hole. That library also contained this panoramic poem, in an age where fiction (if you'll pardon the modern term) was almost unknown. This was a poem of a heroic, marvellous character—a godlike man called Gilgamesh."

" Oh . . ." Hoffman broke in, parted her lips to speak and then changed her mind. She watched him closely.

" He was a man whose beginnings, whose origin were either unknown or unrecorded, and who stalked through the land accomplishing mighty deeds. Gilgamesh was something of a born adventurer who roamed the entire known world at that time, seeking knowledge, seeking immortality. He appeared here, visited there, upsetting tyrants and unsettling kingdoms. He finally met up with a prehistoric man with an unpronounceable name and—"

" *How* unprounceable ?" she interrupted.

" Ut-napishtim."

Hoffman nodded her agreement. " Unprounceable."

"—and that fellow told Gilgamesh the story of *his* life," Nash continued. He looked over at the girl musingly. " Come to think of it, that was probably the first use of the flashback technique in history. Imagine it—a fictioneer of forty centuries ago inventing the flashback."

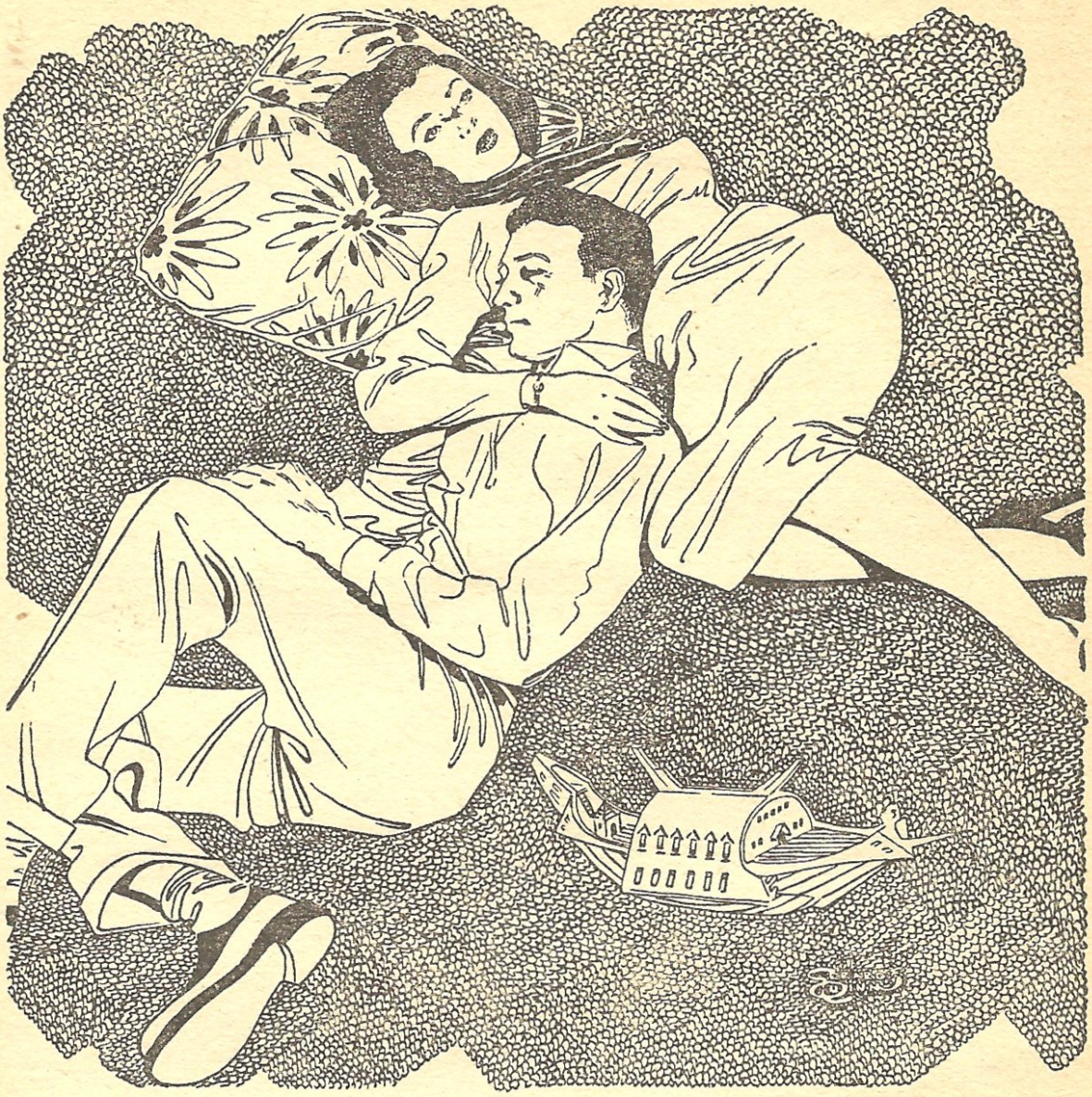
Hoffman cupped her chin in her hand. " Gilgamesh . . ."

" I'm getting there ! So the prehistoric man told Gilgamesh an incredible tale that dwarfed any of his own adventures. He told of a terrible flood that descended upon the world, told of his building a boat and loading it with supplies, loading it with all the animals he could gather together, and the calling aboard of his kinfolk from far and near. He told how his little ship had courageously ridden through the storm and rising waters for many days and nights, and finally, how he sent out first a dove and then a raven to seek land. And that was how Ut-napishtim and his clan lived through the deluge while all around them perished." Nash studied the girl over the rim of his glass. " Sound familiar ?"

" *That* was on the stone tablets ?" she demanded.

" It was—yes, hammered out as pure fiction."

" And the tablets were supposed to be how old ?"



" Three to four thousand years. Do you see now why the Victorians suddenly suffered rising blood pressure ?"

" Indeed I do ! I should be inclined to doubt the evidence myself. But I suppose this is where our third Englishman comes in ?"

" Does, yes. He showed that the tablets were indeed fiction—they were the Assyrian version of hand-me-down Babylonian tales, which in turn were presumably based on fact. Simply a case of one kingdom borrowing a neighbour's folk history and concocting a story. The Englishman made several discoveries indicating the authencity of the tablets, including that layer of clay deposited by the flood. So you see—even historical novels, superman novels, were written four thousand years ago. Knocked out in stone. The sceptic may regard this

one as merely a tale told by some nameless poet who sought to please a king; the believer, as the bold and earliest chronicle of Noah." His fingers drummed on the tabletop. "If you put any faith in archeology at all, you will find that excavators have not only discovered and dated the deluge, but have gone on to discover traces of a still earlier people who must have lived in the times of Genesis. They are slowly catching up with anthropology and geology."

"I'm curious about the dates," Hoffman said, just as curiously watching him.

"The deluge? Well, our Englishman's mass burial of king and slave happened about six thousand years ago. The layer of clay was before that, beneath it. Eight, ten thousand years ago? That remains to be seen. What you call modern man has been on earth now some twenty-five thousand years, and your primitive ancestor existed for perhaps another seventy-five thousand before that. That's a rather broad span in which to attempt to pin down a definite place and time, but men are still digging. One group in particular are now searching for old Ut-napishtim's boat. If and when they find it, they can pretty well date it. Or rather, they can date the trees which furnished timber for the boat."

"I've heard of that," the girl put in. "Tree rings."

"No—not in a case like this. Someone has come up with a new process of measurement called the C-14 method, a process which measures the passage of time by the amount of radioactive residue in an organic substance. Your tree rings would be useless here because the tree died when it was cut down. It might measure life before it was felled, but not after." He paused a moment in thought. "If the archeologists are lucky enough to find a chunk of wood from Ut-napishtim's boat— well, they will tell you the approximate year that tree stood. The approximate year of Noah and his flood." He grinned mischievously. "I wonder if that information will upset anyone?"

They lapsed into silence as the waitress brought the meal and served it. Shirley Hoffman absently watched the woman lay out the dishes, fiddle with the silver, watched Nash spread a napkin in his lap. The room continued to be filled with noisy humanity. She looked up from the napkin to his face, to his eyes which startled her each time she saw them.

"I want to ask one more question," she ventured after a moment. "You very briefly mentioned the subject but you neglected to follow it through."

He stopped a bite of steak on its way to his mouth. "What was that?"

" Did this adventurer, this Gilgamesh fellow, find his immortality?"

Nash held the fork poised in mid-air for a moment and then slowly slipped the meat into his mouth. After a second's hesitation he glanced at the girl's intent face.

" He found what he was searching for. But it was much too late to save his life."

VIII.

Cummings wandered in aimless circles about the inner office, looking for pictures on the wall that had never been there, absently seeking a splotch of sunlight on the floor that had not yet arrived with the early morning sun. He hesitated at the window, gloomily streaked his finger through the dust on the sill and then put his head out into the warm air to search the sky. The sun was still hidden behind the building. An interested pigeon perched on a near-by ledge, returning his curious stare. He blinked at the pigeon and pulled his head in, conscious that there might be others above him.

" He talks to horses," Cummings said dourly to the man seated at the desk behind him.

Dikty nodded in assent. " Apparently."

" He *must* talk to the horses; they're his friends. They tell him when and where to place his money—as if *they* knew which one was going to win ! He scares me. The people over at Treasury tell me he's something unique; he carefully notes down all his winnings but never his losses. Usually, it's the other way around. If they remember to include their gambling at all. But Treasury claims his tax returns are models of something or other; fifty dollars for this case, seventy-five for that one, total earnings as an investigator something less than a thousand per year. You'd think he would starve."

" But he doesn't, apparently," Dikty murmured.

" He doesn't !" Cummings kicked at a chair in disgust. " Thanks to his friends, the horses. His tax returns are the damn'dest things I've ever seen in my life. His habit is to attach a typed letter to each one, naming the tracks, the horses, the dates, the odds, and the amounts of his winnings. Twenty-odd thousand dollars last year if you can believe it ! Treasury does; they don't even bother to check up on him any more—they know he's right. When the returns first started coming in some field office got curious and checked a few dates; they followed his luck pretty closely for two or three years. Now, they're happy that he doesn't deduct his losses, if any. If any, Dikty ! The horses *must* talk to him."

" A shrewd cover," Dikty commented. " A very shrewd cover for an income of less than a thousand per year. That house out in the country cost him something. Say—when was the first year he filed ?"

" March of 1941, for the previous year. In Georgia." Cummings continued his distracted pacing of the room. " I've put a bug in their ear; they've started some discreet snooping, checking his bank account, checking the pay-off windows at those tracks he mentioned. With his fantastic luck, *some* of those parimutuel clerks must remember him. Well, we'll see." He glanced impatiently at his watch. " Want to catch the plane for Louisville at noon; it's the usual rough going up at that new plant on the river." The pacing had brought him to the doorway between the inner and outer offices. He stared around the vacant outer room and then back to Dikty. " The girl's not in yet."

" Something holding her up I suspect."

" Sick ?"

" Landlady said no." Dikty retrieved his pipe from an inner pocket. " Landlady said she left an hour or more ago, in a devil of a hurry. She'll be along."

Cummings turned back to the window. " She had dinner with him last night, eh ? Maybe he gave her a tip on a horse."

" I'm the fool who did the tipping," Dikty retorted sourly, staring into the black bowl of the pipe. " Subject connected the two of us at the funeral when he saw me sniffing her perfume. I thought it was something new and stopped to sniff—it was. But she stumbled onto him in a restaurant last night and he promptly invited her to his table. She jumped at the opportunity. Reports that he made no attempt at all to pump her—it was the other way around."

" She'll do," Cummings nodded, searching the sky. He put his head out once more to find his feathered friend still there, still watching him. Contemplating the pigeon, Cummings asked, " Pick up anything on the microphones ?"

Dikty said no. " Not a blessed thing. He returned to his office after the Hodgkins funeral and spent the entire afternoon reading—apparently. No sounds but chair, desk, shoes, paper, the usual thing. He doesn't even talk to himself out loud." Dikty reached into a vest pocket and extracted a slip of paper. " He stopped by a bookstore this morning to order a book. *The Thermodynamics of the Steady State.* That's not politics—I asked. Something to do with chemical engineering."

" Subject's healthy interest in science continues."

Dikty packed his pipe in silence and then poised an unlit match in the air. " I've been wondering if it could have anything to do with

Code four-four-seven ? Chemical engineering, now. But then, I'm suspicious of everything and everybody."

" I don't know; I sort of doubt it. But I'll look into it." Cummings shook his head. " You can never be sure until you've checked. We had to stop the presses on an encyclopedia last week—the fools were going to publish the figures on the critical mass of U-235."

Dikty was startled. " How'd they find out ?"

" A man worked it out ! The consulting physicist who was writing the article for them figured it out in his fool head, and wanted to include it. We also made him eliminate some references to the refining properties of U-238; he wanted to tell the world how to make a more potent explosion. We seized the plates and several thousand copies already run off. How long can this go on ? "

Dikty didn't answer because the outer door opened then and Shirley Hoffman staggered in, her arms laden with dusty volumes. Her eager young face seemed excited.

" Good morning," she said brightly, looking from one to the other. " I've been to the library. Treasure trove." She pushed the corridor door shut with her heel and dropped the burden on her desk. " Heavy work."

Cummings gravely examined the stack of books and then glanced at Dikty. " Frittering away her time with reading. Don't you keep her busy ?"

" Bosh," Hoffman cut in before Dikty could think of an answer. " I'm hot on the trail."

" Of what ?"

" Of mummies, buried kings, the deluge, and Gilgamesh." She paused a moment in frowning thought. " Gilgamesh can't be found. Not in our library."

" I'll get it for you in Washington," Cummings said, and in the next breath added, " Why ?"

" Told you I was hot on the trail ! Our subject knows all about Gilgamesh, so *I* want to know all about Gilgamesh." She thought to correct the supervisor. " Gilgamesh is a *him*, not an *it*. A prehistoric man who wandered around the ancient Mediterranean; he's in archeology. Can you really get it for me ?"

" I don't believe there are more than nine million books in the Library of Congress." He snapped his fingers. " You name it and you can have it. Just like that."

" Now you're making fun of me."

Cummings turned again to examine the stack of volumes. " And now it's archeology ?"

" Yes, very much so. It was all he talked about last night, and he wasn't merely trying to impress me. He knew. I shouldn't be surprised to find he knows things that aren't in these books."

Dikty grunted. " He knows which horse is the winner."

A door slammed with a distant, muffled sound and the three of them ceased talking. Dikty twisted around in his chair to reach out and touch the volume control on a tiny speaker mounted above the desk. The speaker hummed with increased life, but nothing more. The trio waited long minutes in continued silence.

" Subject has reported for work," Dikty muttered after a while. " Busy making his thousand or less for this year." He listened as the microphones picked up new sounds, the muffled footsteps crossing a distant floor, a window being raised, a chair being pulled away from a desk. A heavy squeaking as the chair was occupied. And then nothing.

" Serious thinker," Cummings suggested dryly.

" He is, really," Hoffman agreed. " He has the detached viewpoint of the scholar, the witness who is sitting out of the mainstream of history, merely appraising it as it marches by. He continually referred to *my* ancestors, *my* humans, as if they were mine but not his."

" He had to be born somewhere," Dikty repeated his old declaration. " And I don't mean in Miami, Florida, on March 8th, 1940. After all—he's thirty-one years old now."

" Apparently," Cummings murmured. He was at the window again, watching the pigeon.

Dikty threw him a suspicious glance.

" I rather like him," Hoffman quickly interposed. " He is a funny man. By that I mean, strange. Strange eyes, strange skin, strange manner of thinking. Sometimes I could glimpse the thought behind his speech—very strange thoughts. I found myself wondering if he thought in words, in pictures, in symbols or abstractions; perhaps he doesn't think the way we do at all. But I rather like him."

" Don't," Cummings warned suddenly, whirling from the window. " And be careful ! Have you read the reports—oh, yes, you typed them. Well then, study them carefully, and be careful of him. Until we or the police turn up a proven murderer, he's our suspect—a double suspect for loitering about the Ridge." He turned on Dikty. " What was it he said to the police yesterday ? After the funeral ?"

" That he was thinking of moving, that there isn't much left for him in Knoxville any more."

" If I thought for a moment he was referring to Hodgkins, I'd nab him now ! But he seems to have another purpose now—he's hunting the Hodgkins widow. "

" Who isn't ?"

Cummings again caught sight of the books stacked atop the girl's desk. " Why these," he asked curiously, " why this—this what's-his-name man ?"

" Gilgamesh. Partly to satisfy my curiosity," she hastened to explain, " and partly to catch him in an error. If *that's* possible. He told me things last night about history (or prehistory, rather) that I never dreamed existed, and I'm very eager to learn more. He also told me things that may not be in these books and if that be the case . . ." She let the suggestion hang there.

" If that be the case, we know more that we know less about him." He flipped open a cover to read the flyleaf.

" Do you know about something or other called the C-14 Method?" Shirley asked.

Cummings shut the book to study her. " Yes. An atomic measurement of time, a by-product of the Ridge you might say. Why ?"

" He said, if they find the remains of old Noah's Ark, they can measure the passage of time since it was built."

" That's right."

Dikty laughed aloud, a short, chopped, nasty laugh. " Now I've got an idea ! Let's cut off one of his fingers and measure *his* age."

" That's revolting," Hoffman declared.

Cummings turned completely around and then stopped. " Dikty . . ." he said, thumping the topmost book, " Dikty . . ."

" Oh, now really," the girl protested. " That's going too far !"

Cummings silenced her with one swift glance. " Dikty," he repeated, " if our subject *should* turn up dead, if something unfortunate *should* happen to him, well, you grab that corpse, quick !"

Dikty nodded, slightly astonished that his bad joke had contained a grim morsel of merit. Shirley Hoffman held her shocked silence, sensing the rebuke the supervisor had thrown at her. His callous suggestion had unnerved her.

" I don't believe in passing up anything," Cummings continued, " no matter how insignificant or ridiculous it may seem on the surface. That's why our outfit is in the high and tight position we occupy today. And inasmuch as we can't locate his date and place of birth, we,—oh, my God !"

" What's the matter ?" Dikty was on his feet in alarm.

" Hodgkins's wife—I mean widow. We couldn't find her birth date or birthplace either. When she married Hodgkins she had no past !"

Dikty lost only a second in absorbing the statement and then sat down again, to scrabble frantically through the papers in a desk drawer. He finally found those he was searching for and ran his eyes rapidly

down the typed lines, coming to rest on two long paragraphs. He read the paragraphs a second time and then looked up at his superior.

" According to the police and the neighbours, a part of the descriptions match: the unusual eyes, the poised swift lines, the long youthfulness . . ."

Cummings hesitated only a moment longer, his face now tightened in a harsh knot of speculative thought, and then he grabbed up his hat. " That plane—" He sped for the outer door.

" Don't forget Gilgamesh," Hoffman called after him.

" What ?" Cummings jerked around.

" Gilgamesh—my prehistoric man."

He threw her a fleeting, curious stare and was gone. The corridor door slammed shut behind him.

" I think," Dikty said quietly, " that something is about to happen to our friend."

IX.

Nash had slowly become aware that someone was following him.

The disturbing shadow lurking somewhere behind was not the security agent, Dikty. Dikty's habitual spying on him the past few weeks had easily resolved into a predictable pattern, had become a familiar and routine thing, a known presence he could almost sense whenever the man took up the trail behind him. Dikty would occasionally slip and allow himself to be glimpsed in a mirror, a store window, allow himself to be seen on an abrupt about-face. Dikty knew that Nash was aware of his presence and accepted it; the motions of secrecy were maintained because that was a part of the game, but the actual secrecy had been abandoned when each realized the other was aware of the situation.

And now—this new shadow.

It was not Dikty behind him; Dikty was ahead of him. This day, Gilbert Nash had quietly and with some amusement turned the tables and begun following Dikty, for he saw that the security agent was intent upon Hodgkins's widow. Nash plodded along behind Dikty, following him on the rounds of several banks, the various utility offices, numberless real estate brokers and some of the automobile agencies. Doubtless the police had already gone over a part or all of the ground during their routine search of the hotels and transportation depots, but still Dikty must go over it again, and Nash curiously followed to see what he might turn up. Hour after hour of the hot afternoon went by and still Dikty searched fruitlessly, still Nash tagged along after him, and still the strange new shadow hung behind them both.

It was not the girl on his trail—Nash realized that. Shirley Hoffman played a different game, had played it well since the day of the funeral. She was not expert enough to keep completely hidden as the stranger was doing, not well enough versed in the art of stalking a man to avoid reflections in store windows, to avoid being caught flat-footed by a quick stop or a turn-around. Too, she would never excel at tailing and roping because there was about her person an aura which gave her away. Her perfume may have been part of it, or her personality, or the mental activity she exuded; but she could not hide herself. Nash would suddenly realize she was somewhere near, would walk around a corner or pass through a doorway and she would be there. It was a compelling, magnetic quality that advertised her presence in advance.

But that was the way she played the game. Instead of attempting to hide from him she placed herself where he might see her, where he might chance upon her as by accident, stop to talk, and end by inviting her to spend an evening. They had dined together several times and twice had gone to a concert; once she offered to take him to a movie but he declined, disliking the idea of wasting several hours in a theatre watching a picture he didn't care for.

Nash stopped in a drugstore, ordered ice cream, and sat down on a stool where he could watch the doorway of the real estate office across the street. Dikty in his fashion and Hoffman in hers—they had certainly taken an intent interest in him. He grinned briefly. They were unmistakably preparing to close in. And now the new tail.

Idly, he watched the people going by outside the window, wondering if one of them might be his new shadow. A young man sauntering along with a brief case, two women with packages in their hands and inspecting each window as they passed it, a gangling youth reading a science fiction magazine, a man, another man, a young woman, another man, two boys carrying empty newspaper bags, an old fellow wearing a battered straw hat, a man with a brief case—Nash jerked his eyes around to follow the repeater. Brief case entered the drugstore and bought a package of pipe tobacco, left again. He did not reappear. The parade continued past the window. Dikty emerged from the doorway across the street. Nash finished his ice cream and strolled outside, letting Dikty have a lead the length of a full block. As soon as he left the drugstore he again felt the presence of eyes behind him, on him.

The invisible eyes were disconcerting, malignant. They imparted a sense of unease and irritation because they could not be located and identified, because they constantly bored into the back of his head like

telescopic sights on a rifle. Again and again he attempted to locate them without visibly advertising his intention, but without success. The man was damned slick—whoever he was. He briefly considered Dikty's superior officer, Cummings; it could be Cummings. Or it could be a new man Cummings had assigned to the city.

Dikty continued his hopeless search for some hint or trace of the widow possibly aware of Nash behind him or possibly not, but Nash was certain he did not feel the new shadow there or he would certainly have done something about it. *Sudden thought*: Dikty might know very well a new man was behind the two of them, and so ignored the matter. In any event, Dikty went on looking for some scrap of information that might point out the hiding place of Hodgkins's widow, but looked for nothing behind him.

Nash grinned to himself once more as a wry thought struck him. Suppose, just suppose, that every detective or spy or secret agent of whatever authority or source wore some sort of identifying badge or clothing—a long red cloak perhaps. Wouldn't it be a ludicrous sight for the townspeople to see Dikty slipping along the street in his flapping red cloak, to see Nash tripping along behind him in his, and then by merely turning their heads, to see the third party sneaking along in the rear ! A regular parade of spies, each following the other. With now and then perhaps a local plain-clothes man standing idly on some street corner, watching the crowds and watching the first three pussy-footing along.

Nash laughed aloud.

Late in the afternoon, Dikty's trail led past the public library and Nash felt the sudden intuition that Shirley Hoffman was near by. He abandoned Dikty and turned in the double doors. She was checking out some books at the desk. Nash walked up beside her, watched the librarian punch Hoffman's card and number through the dating machine, and reached over to pick them up.

" *The Oldest Civilization of Greece*," he read after flipping the uppermost volume spine-up. " Badly outdated; fifty years old if it's a day."

The librarian looked at him with disapproval.

" Hello," Hoffman smiled. " You have newer, I suppose ?"

" Have, yes. Want to go out and look at them ?"

" I'm willing—although I suppose I should have hesitated modestly."

Nash laughed. " A book has never raped anyone yet."

The librarian glared.

Hoffman turned with flushed face and made for the door. Outside, she paused. " Now how can I go back in there and face that woman ?"

" Oh, she didn't mind what I said. It was the noise I was making."

" I can just imagine !" Hoffman retorted, her voice reflecting the fast-fading indignation. " It will be days . . . Oh, I *do* have something here." She fingered the books he was carrying and removed one from the stack. " The librarian recommended it after I outlined my wants : Huxley's "*After Many a Summer Dies the Swan.*"

He stared at it curiously. " Why that ?"

" I asked for anything on longevity or immortality."

Nash stopped walking and turned to look at her. People darted impatiently around the small island-obstacle they created on the sidewalk. " Still riding Gilgamesh ?"

Hoffman nodded determinedly. " Still Gilgamesh. Mr. Cummings is sending something from Washington."

" But this isn't the same," he protested, tapping the volume in her hands. " This is a dying old man who is determined not to die; he's willing to spend every million he has to stay alive forever."

" Does he ?" she wanted to know, examining the worn cover of the book.

" That's the fine point of the story; read it and see. You'll have to wade through sermons knee-deep, but see for yourself." He began walking again.

" But he and Gilgamesh were after the same thing," she protested.

" Yes—in a sense. This old man was fifty or sixty years old and afraid to die because he was also afraid of meeting your God face to face. But Gilgamesh was something else altogether. Gilgamesh was —well, *much* older, and sought only to prolong his life its natural span, to live out his appointed time. Much the way you would ward off a childhood disease, that you might live to be an adult. He was not afraid of dying, nor afraid to meet his God; when he realized his search for ' immortality ' was a useless one he abandoned it, resigned himself to dying young." Nash gave her a sidelong glance. " That's a relative term; not young in the sense that you are young."

Hoffman moved her head to catch his eye. " And how young are you ?" she asked bluntly.

" Over twenty-one," he answered promptly and laughed. " I learned that from women who vote."

" Cheat !" she declared.

" Nosey," he replied.

They walked slowly with the evening crowd, making no attempt to match its speed and bound nowhere in particular. People hurried past them intent upon their many individual destinations, upon their personal futures. After a silence the girl spoke again.

" How old was Gilgamesh ?"

"When?"

"Oh—when he met Noah for instance."

"I would say many hundreds of years."

"Really?" She thought about it for a moment. "Then he would be several thousand today?"

Nash inclined his head. "Would, yes."

"But that's quite impossible!"

"Yes, isn't it."

She looked up at him with mild irritation. "You are saying that just to agree with me, not because you believe it. No one lives to be several thousand years old."

"Remind me to tell you about the May flies—later on this evening when I have you in my web."

"May flies? What in the world do they have to do with Gilgamesh?"

"They live a full lifetime in less than a day," he said.

"Oh? Your implication then, is that a year in the life of Gilgamesh is not the same as a year in my life?"

"Yes and no; again, the terms are relative."

"But would Gilgamesh *still* say he was dying young?"

"If he were alive today, yes."

"Why?"

"Because he would be—far short of his old age."

"But why," she persisted. "Why would he be dying? What was it that he was seeking to prolong his life?"

Nash grinned down at her in high humour. "Those buried tablets didn't say. The old poet gave no hint."

Irritation welled up within her again but she fought to conceal it. She changed the subject. "Where shall we eat? I'm hungry. *We* are going to eat, aren't we?"

"Spoken like a forward wench. Dine them and wine them well, then invite then in to see the etchings." He laughed aloud and a passing few turned to stare at him. Taking her arm, he guided her across the sidewalk. "Can you cook?"

"Certainly. I expect to be married someday."

"Let's practice this evening."

"Cooking, or being married?"

"Hoffman!" He removed his hand from her arm.

"I suppose," she said expectantly, "that you have the usual well-equipped kitchen?"

"Have, yes. My car's not far from here." He moved a single step and then stopped again, quite suddenly. His attitude was one of intent listening. The pedestrian current flowed around them.

Hoffman glanced up at him, turned to follow his blank gaze and instantly mistook his intentions. He was staring absently at a florist's display window, now lighted up for the coming darkness. She thought he was examining the window.

" Flowers ?" she asked with surprise. " Are you becoming serious?"

" What ?" he replied, inattentive. He was still listening to something unseen, unknown. In the previous instant he had realized that the eyes were gone, the telescopic sights removed from the back of his head. He knew it as surely as though he had seen a man stop, remove the flapping red cloak with a flourish, and walk off home. Thinking back quickly, he realized now that the boring eyes had left him when he entered the library, but had not been there again when he emerged with the girl.

And that implied—what ?

That the eyes knew the girl was waiting in the library waiting for him, and she would take up the surveillance for the remainder of the evening ? Or had those eyes not been interested in him at all but were really following Dikty ? Had they rested so long on the cut of his hair merely because he happened to be in direct line of sight between Dikty and the unknown shadow ? But why should those eyes be interested in Dikty ? Dikty was no threat to their hallowed security. Or perhaps—when *he* ceased trailing Dikty, it was no longer necessary for the eyes to follow him. Was the girl expected to watch for the night, or would there be another when she left him ? Had they begun a twenty-four hour watch over him ? If they had, it was past time to start moving; they were surely preparing to close in.

" Gilbert Nash !" the girl exclaimed.

He emerged from his inner shell. " What ?"

" I said, the florist is closed."

That escaped him for a second or so until his glance came to rest on the illuminated window, and he guessed her thoughts. " Oh, too bad," he answered. " And I wanted to buy you a cactus. Come on, let's find my car. I'm curious as to how well you can cook."

Nash moved his chair back from the table and patted his stomach, his lips making a contented sound. He winked across the table at the girl and closed his eyes.

" Behold," Shirley Hoffman declared, " the well-stuffed male ! One would think you'd never eaten catfish and hush puppies before." She placed an elbow on the table and propped her chin in the palm of her hand. " And now, if you're running true to form, you want to take a nap."

" *Negra consentida* ; you speak like experience."

" I've had experience with my boss and with male relatives. And that means what ?"

" My pet brunette. After tonight, you are. Any woman who can prepare a meal like that *is* my pet."

" Any woman," she repeated. " I'm only the latest."

" The latest *and* the first, in this house at least. It would surprise you to know how long it has been since I've enjoyed a woman's company." He chuckled. " My good neighbours will have a field day tomorrow; they usually must go to the trailer camp for their scandal."

" More power to them," she retorted. " I enjoy gossips. I don't mean that I enjoy gossiping, but that I can innocently give others reason to gossip. I enjoy knowing that they are clacking away their little tongues over something I've done—the more outrageous, the better. Makes me feel good."

" And makes them seem smaller in your eyes. But if you'd really like to provide them with spectacle, we can open the blinds and stage a bang-up performance."

" Such as what ?" she asked with narrowed eyes.

" I'll chase you around and around the sofa."

" No, thank you. I'm more interested in your library. *And* the artifacts. I want to see what the archeologists missed." Her stare was candid. " I want to see the youth dances."

" Do you now ?" He pushed away from the table as if to get up. " You'll also want to see my etchings." Nash laughed at her sudden expression. " Honest, I do have etchings and you will want to see them. I have several plates on the Mycenaean Age, some early Minoan and late Egyptian sketches. I also have a few rare ones, old treasures, done by an artist attached to Napoleon's army. I think you'll enjoy them."

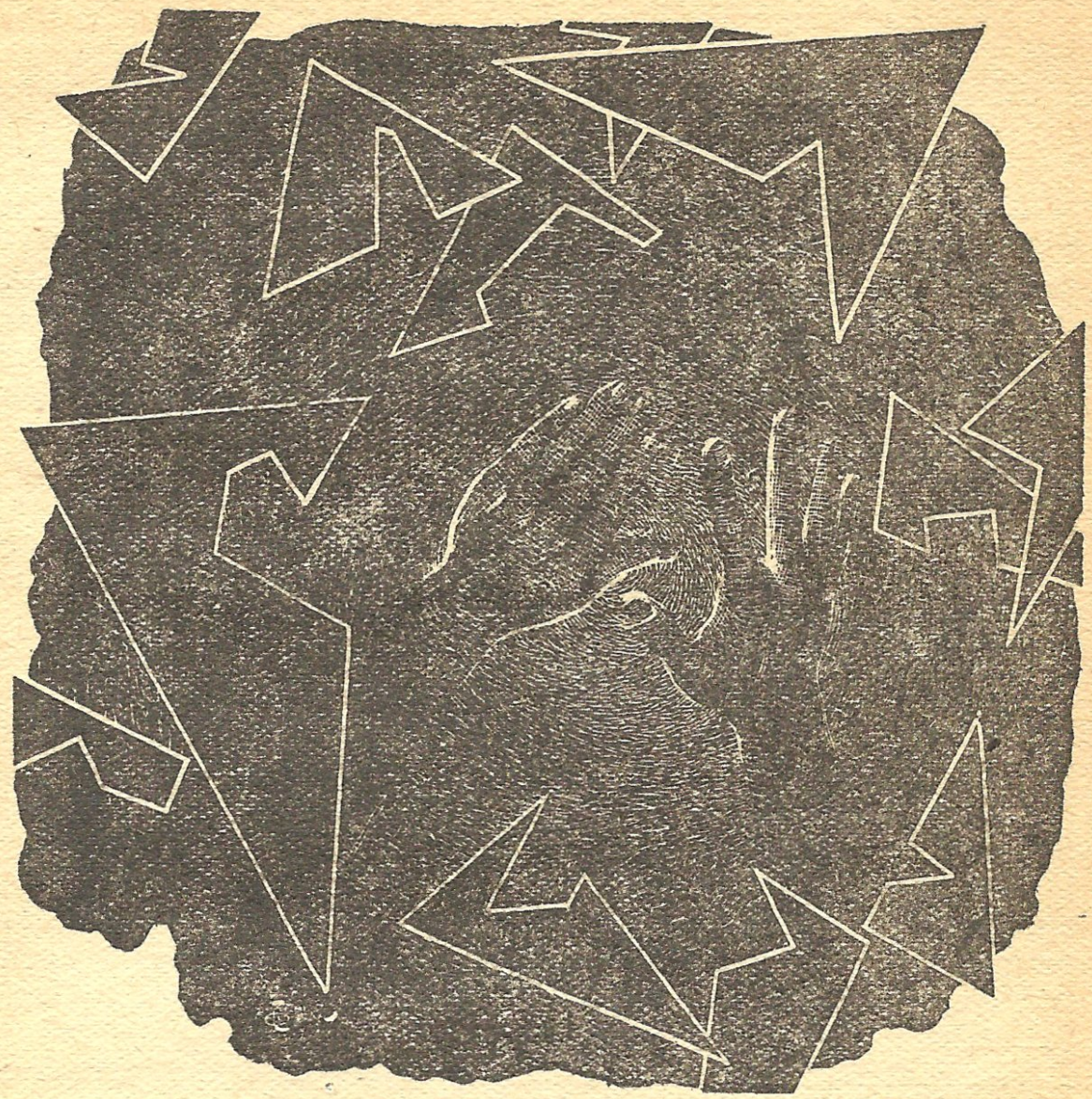
" Napoleon ? In Egypt ?"

" Was, yes." He closed his eyes for a moment in concentrated thought. " Near the end of the eighteenth century I think, following his Italian conquests. Somewhat like another man before him he was really seeking a trade route to India, but he wound up on the Nile with the army and the artist. Lasted a bit over a year; he and the artist lived to return home but the army wasn't as lucky. The artist—by name of Denon, Vivant Denon—carried with him in his imagination and on paper some of the most peculiar treasures yet taken from Egypt."

" Peculiar ?" she questioned.

" Wait until you see them. Highly prized by certain types of collectors, and rather expensive today."

" How did you get them ?"



"There was a day when they were quite cheap—a dime a dozen. Time has increased their value of course."

"Very well, you've aroused my curiosity; I want to see these precious treasures."

"Rather thought you would." He stood up and pulled back the chair for her. "Leave the dishes for the maid."

"You have one?" she said quickly, more sharply than she had intended. His casual statement had caught her off guard.

"Me," he answered. "I can do them later." Her tone had drawn his curious, questioning scrutiny. "Meanwhile, the night is *young* and you're so . . ."

Shirley turned, raised her lips. "Yes?"

" You're so hungry for knowledge." He pretended not to see the minute annoyance on her face. " Ten paces forward and turn right at the closed door."

He preceded her across the room and opened a door into another that she had not seen in her first tour of the house. Nash entered the darkened place and snapped on the lights. The door revealed a book lined room, four solid walls of volumes reaching from ceiling to floor without a window opening anywhere, a room which contained nothing else other than two easy chairs, a single floor lamp placed between them, and a record player.

" Well !" she said with pleasant surprise.

" Conducive to thinking," he explained, " either deep or shallow thoughts depending upon the inclination, and very nice for dreaming I might add. A woolgatherer's paradise. There's no interference from the outside—the room is fairly soundproof. Try it sometime.' He grinned at her and held it until she had responded. " The books are arranged in no particular system or order except by their general nature and my own habits. Starting there"—and he motioned to a far corner—" mathematics, philosophy, chemistry, biochemistry, geology and geography, down there the psychology and sociology. Sociology extends around the corner and continues there. It seems to be on the increase, you see. Here, a bit on linguistics and much on astronomy. A favourite of mine, that—plus archeology and anthropology. Over there is paleontology, and those two shelves are devoted to physics." He studied the two shelves and added softly, " That, too, seems to be on the increase."

" No books ?" she asked curiously while staring about the impressive room. " Just books for reading ?"

" Fiction ? These are more provocative and some are certainly wilder than fiction. But yes—some." He moved the guiding finger. " Over there."

" Not many," Shirley said a moment later.

" Not much time for it," he confessed.

" Pardon me," she contradicted, and then smiled to rob the contradiction of its sting, " but I know a man who thinks you have all the time in the world. To do nothing."

" The man would be shocked to discover how wrong he is !" Nash declared almost angrily. He regretted the words immediately, conscious of the effect they would have on her aware of the implications and questions that would spring into her mind if not to her lips. His tone changed to a light banter as he sought to erase the impression

that snapped reply might have given. "The man is jealous—he thinks I'm loafing and he wishes he could."

"Indeed?" she said dryly. Her steady glance on his face said volumes more. And then she, too, changed her tone. "And now, sir, the etchings. Or am I being forward again?"

He brought them to her from some secure resting place in some other room of the house, returning to the book-lined room with both hands full. While he was away she had started the record player and now she sat relaxed in one of the two chairs, awaiting him. He placed the gentle burden in her lap and she held it there in preliminary examination. There were two large loose-leaf volumes like scrapbooks and many folders and folios, all bound or wrapped in a sturdy material for maximum protection. Before she looked at any of the pictures she saw that all were covered with a thin, tough plastic like cellophane to protect them from dirt and exposure; even so, some of the paper was yellowed and cracked with age and occasionally a jagged streak ran across the face of an illustration to betray its ancient brittleness. She saw all that and the lines of the drawings before she actually saw the intricate pictures themselves, before the careful detail stood out against the whole. She even found herself searching for the name of the illustrator in the lower corners of the first picture, before the massed lines separated themselves and the individual figures commanded her attention. Her eyes wandered across the face of the page and stopped on a figure she recognized, Hathor, the Egyptian goddess of love. She looked to see what the goddess was doing and discovered the man at her side.

Shirley Hoffman heard a sharp indrawn breath and then realized it was her own. She glanced up quickly to see if Nash was watching, was laughing at her, but he had moved across the room. She looked back to the picture, really looked at it and felt the warm blood rush to her face. The mounting flush angered and annoyed her and she strove to conquer it, to thrust it away. She concentrated on Hathor, and those other figures clustered about the goddess. Across the room the music played softly on.

She was not aware of the passage of time, nor of the room, nor consciously aware of one record after another dropping onto the turntable to play itself out. Occasionally she would glance up with a start, turn to look about her, to look for Nash. Sometimes he would be sitting in the chair behind her, concentrating on a book, or again he would be gone from the room altogether without her knowing that the door had opened or closed. She saw him once with an opened can of beer in his hand and next time she looked the can was missing, but still

there was no thought of passing time. She vaguely realized the unwanted flush had long left her face realized there was no longer that burning, creeping sensation beneath the skin of her cheeks. Instead, there was something else she couldn't immediately identify and it was not confined to her face. A hungry, yearning something that seemed akin to the ancient people who were but inked lines on paper, a something that seemed to search for an outlet still hidden in an undefined vacuum.

With each turned page, each carefully shielded drawing plucked out of a folder, examined in minute detail and then replaced for the next, she understood a little more of what had been meant by " peculiar treasure." She found herself contemplating the mind and the personality of the men who had done these illustrations, wondering about their various receptions in the times in which they lived speculating on what they had first found in those faraway lands to fire their imaginations in this manner. Had Napoleon himself seen this one, that one —and what had he thought of it ? Near the end, she realized something else. The men who had done these things were not conventional thinkers, in the conventional sense. They too, by this evidence, did not think as she thought, as Dikty thought, or even Cummings. Did they think along other lines, in abstractions or symbols, or perhaps in a manner utterly foreign—as Nash did ? Who was to say now ? They were dead, buried, perhaps even their graves lost and forgotten. They could only be half-judged by what they had left behind, and what present-day human could judge evidence such as this with a mind free of bias and prejudice, free of smirking obscenities ? A most undeserved obsequy.

She awoke to her surroundings. When she awoke she found herself staring blankly at a shelf of books on the far wall, found her hands folded in her lap atop the stack of pictures, found the record player still turning on some nameless waltz. She concentrated on that, on the name of the piece, and when she had placed it the full awareness of the room had returned to her. Without turning, she knew Nash was seated in the other chair behind her. He made no noise, did not move, but she knew he was there. She also knew she was hungry and what had caused it, what could satisfy it.

Calmly, quite detached, she analyzed the hunger and traced it to its root. The vacuum was no longer undefined and the outlet no longer hidden from her searching mind.

Shirley Hoffman stood up, transferred the contents of her lap to the chair seat, and stepped around the floor lamp to stand behind the second chair. Nash was deep in a printed page. Eagerly, boldly, she

bent over him and locked his unsuspecting head in her arms. Then she kissed him held him locked there for a racing eternity, unwilling to break the contact of their lips.

He jumped when their lips met, struggled to break free but she only tightened her arms. Then he sat quite still. Had she been watching his hands she would have seen his fists clench in determination, only to open slowly in a peculiar surrender. Had she been watching his hands and had she been able to read the enigmatic messages there, she would have known that he was fighting an intangible, fighting to reject and not use the easy access she had provided into a very private place—the last remaining privacy man has in the world. The privacy of her mind, the very much hidden world of personal thought. As she persisted in the long kiss his hands unclenched, lay limp and open, and he walked through a doorway into a room without her knowing it. Gregg Hodgkins had required years to discover that entrance and the aftermath.

Shirley broke away, stepped back, breathing heavily.

Nash stared up at her in mild astonishment and uttered a single word. She did not know the word, it was not English and so was strange to her. But by the intensity with which he said it she knew it to be an epithet.

" Are you angry ?" she said after a moment.

His answer was not an answer to her question. It was something else altogether, but she thought he was referring to the kiss.

" So long !" Nash exclaimed, still astonished. " So incredibly long. I couldn't see the end at all."

X.

" You owe me so much," Shirley said unexpectedly, " so very, very much."

Nash was suddenly startled, wondering if he had made a major error in judgment. He remained on his knees before the fireplace, coaxing into life the small fire he had kindled to dispel the chill the night weather had brought. It would be hot again tomorrow, the summer stickiness of Knoxville, but tonight the mountains had sent down an unusual coolness that penetrated even the house. He did not turn to where she sat, did not pause in the casual act of fanning the newborn flames into steady life, but waited silently for the words that must follow.

She put down her coffee cup into its saucer. " You owe me an explanation. Many explanations."

He felt the disappointment welling up within him, the keen sense of error. " I do ?"

She must have nodded behind him. " May flies," she said. " An unexplained search for an unexplained immortality. And why it was found too late to save a life. *What* was found too late ? Oh, you owe me so very much !"

A dread, growing weight was suddenly lifted. Nash almost laughed aloud as he asked, " Who wants to know ? You—or a man you know?"

" I do," she retorted promptly. " But I suppose the man will know, eventually. I rather like my job."

He slowly turned about and sat down, reached out a hand to pat the hearth rug beneath him. " Come here."

Shirley crossed the room and sank down beside him. " This is nice." She folded her legs beneath her skirt.

" Most of the ordinary things in the world are nice. Cling to them while you can."

" Am I going to hear a lecture ?" she asked archly.

" No, Of course not."

" I was only teasing. Talk to me. About May flies."

" It may get awfully boring."

" Then I'll stop you. I know how."

" Yes," he agreed dryly, " you know how. And what you don't yet know you'll learn. You have a long time to learn."

" Three score and ten," she quoted the clichè.

He said nothing to that, wrapped in his own thoughts. Behind them the tiny flames crackled through the kindling, spreading the warmth across their backs. The house was quiet, the record player long stilled and the lights turned out except for a small table lamp in the room with them. The door to the book-lined room was closed and the many shelves of volumes forgotten for the night.

" May flies," she finally prompted.

" May flies," he repeated. " The eggs are laid in fresh water, to be scattered by the currents, finally to come to rest wherever they may. The larvae often live for several years."

" I know that," she interrupted.

" Be quiet. The adults are the ones that concern us. Do you know how long the adults live ? A few hours. Only a few hours—they must live a full lifetime in less than a day. That seems strange to us, incredibly strange and incredibly tragic, because *we* live three score and ten." He glanced briefly at the girl beside him. " Sometimes longer. But in the space of those few hours the insect must accomplish his mission, fulfill whatever duties have devolved upon him, and prepare the eggs

for the following generation. And then die of old age before sundown. Is he aware that only a few hours have passed ?"

" Well . . . I don't know."

" He is not. If he is able to think about it at all, a lifetime is a lifetime. If he is able to think about it, measure it, compare it, then he would surely know he was being cheated by nature. But he is not able to do any of these things because he has no point of comparison, no yardstick to measure time or to measure the span of his life against the spans of other living creatures around him. So, he lives his full lifetime until old age catches him. You do that, don't you ?"

" Well, of course. But I'm not—"

" You aren't a fly. You are a human. A human has the means and the intelligence to think, to reason, to measure. Humans measure time in a variety of ways, have measured the time required to make one journey about the sun and have called that a year. Therefore you know what a year is and how many of them you may reasonably expect before old age catches up with you. The insect cannot do that and must rely on instinct, must see to it that his work is done to beat that instinctive deadline. But insect and human are both following the same pattern: birth, life over a given span, death. The May fly is as old at the end of the day as you will be at the end of three score and ten. There is no real difference except that each lives according to a different measure of time."

" Oh, I think I see what you're getting at. You're drawing an analogy."

He nodded. " An analogy. The insect lives his span and that is that. He doesn't know about you; if he did, he would be amazed, would be unable to believe that you could live for thousands of years —according to *his* timetable. But you know you aren't living for thousands of years because his timetable is but a few hours in your life. His timetable is below you, and insignificant. Very well then, what is above you ? Is there a larger timetable on which *your* three score and ten are but a few hours as well ?"

Shirley opened her mouth and then snapped it shut again, the sudden words unutterable as his startling suggestion penetrated. She was staring up into his face with fascination.

" You are aware of course that other living things on earth outlast your own lifetimes: elephants, parakeets, some species of fish; some of those remarkable trees on the Western Coast live for thousands of years. Each of them may have its own means of measuring the passage of time, but it certainly isn't by your standards and your timetables. Life spans, and the schedules by which those spans are measured may

be either large or small, depending upon who is doing the measuring. You may live several thousand years longer than the insect; those trees may live several thousand years longer than you, relatively speaking. Do you think the trees represent the absolute limit?

"Hasn't it ever occurred to you that something else may live untold thousands of years beyond you, beyond the trees, may live a fantastic length of time according to your standards? But then, your standards aren't valid when applied to a different scale, a different concept of life. No more than the standards of the May fly would be if he attempted to fit you into his life concept. You look down upon the insect from your longer life span, to realize he is gone in a few of your hours. May not something else look down upon you, see you vanish in a few hours?"

"All this," Shirley said in a small voice, "is leading up to something, I can feel it."

"All this is leading up to Gilgamesh and his supposed immortality. I repeat, *supposed* immortality. An immortal according to common definition is a person who never dies, a person with unending existence. Gilgamesh was no immortal; he was only thought to be because he existed before the ancient poets were born and was still there after they had gone. He seemed immortal to them because he did not grow old and die as they did, because he did not follow their timetable to the grave. Therefore, it pleased them to build a host of spurious legends about him, around him, to make of him something he was not.

"The human species has a terrible blind spot: time. Because they are able to reason and to measure, they reasoned time into existence and then measured it according to standards they could easily understand. But humans also have egos, and whenever and wherever possible, those egos are catered to; so they built time around themselves and used measures that fitted themselves alone. They cast the entire universe into their own time mould, judging it by their own vain standards as if those standards were the universal prime law. Humans believe they alone live *natural* life spans the oft-mentioned three score and ten, while all else in creation is either above or below normal. Their vanity must make them the normal ones. They look down upon the insect as subnormal because he live only hours or days of their time; they openly gape and marvel at those hoary old trees because the trees live an abnormal length of their time. They will never admit that the insect, or the tree, or something else altogether may know time in the true normal—if the true normal actually exists."

"Does it?" she asked.

"I wouldn't know. I'm not that big." He shook his head. "Humans believe they are the pinpoint upon which all creation revolves."

" That doesn't sound fair."

" No, it doesn't. But I believe it to be the truth. An ego living on an island with millions of similar egos of the same pattern will eventually arrive at the erroneous conclusion that they, the egos, are creation and therefore all else must conform to their schedules and standards. Your histories are full of repetitions of that."

" But there is a way out."

" Is, yes. Get kicked off the island by something bigger."

Shirley was still watching his face. " Or have that bigger something move onto the island with them."

" Fine theory, but it doesn't prove out in practice. An individual ego here and there may be convinced but the greater mass will not. So—Gilgamesh. Those ancient ones could not see the contradiction in their own legends; they said he was an immortal, seeking the local equivalent to the fountain of youth. If he were immortal he wouldn't have need of the miraculous waters, but if he needed the waters he could not be an immortal. They confused cause and effect to build a contradictory legend."

The fire burned merrily behind them, warming their backs and sending fairy shadows dancing on the walls. High overhead in the night sky a heavy plane laboured through the darkness, the noise of its motors trailing far behind it.

Shirley finally asked, " What *was* Gilgamesh seeking ?"

" Water. Water to prolong his life."

" You said . . ." and she halted to remember his words. " You said he found it too late to save his life, he found his ' immortality ' too late. What did you mean by that ?"

" I meant that Gilgamesh sought water to live, and by the time he found it the die was already cast—it was too late to save his life because he had gone too long without it."

" Water ?" she asked incredulously.

" There was water on the island, the type of water natural to that island. But it was not his kind of water."

" I think you'd better explain that," she said dubiously.

" Suppose I tell you a story ?"

" What kind of a story ?"

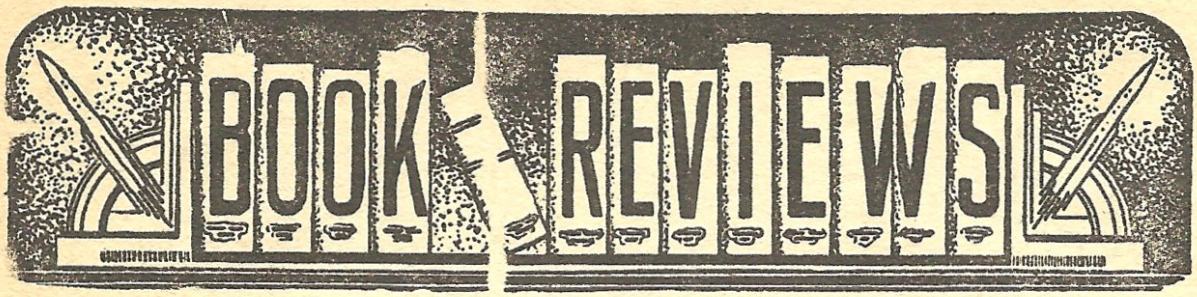
" About a shipwrecked mariner, a castaway." He stared at the moving shadows on the opposite wall. " About a man from another island who lived a part of his life span on the foods and water natural to his island." He paused again. " About Gilgamesh."

" I want to know *all* about Gilgamesh."

" To satisfy a man you know ?"

" To satisfy me."

To be concluded



Having read—amongst other things—practically every fantasy published in the past twenty-five years, it is interesting to note that occasions for wild enthusiasm have been rare. A book here and there, quite a few magazine stories, remain vividly in my memory. The incidence has been more frequent in recent years, and I say this not merely because the impressions are fresher, or perhaps because a long-suffering yearning for good fantasy is now more easily assuaged by anything a little above the ordinary. It is simply that as the field has grown so the proportion of better quality stories has increased in itself, and there are currently practising a number of authors who can not only write well, but dare to treat their subject intelligently, and to imbue their stories with realism both in characterisation and detail. In this category I gratefully place two of this month's new novels.

First and foremost a book which has given me as much pleasure to read as any other in the past, and for which I feel I cannot adequately express my appreciation. As announced in the last issue Edgar Pangborn's **A Mirror For Observers** (Fredk. Muller, 12/6d.) is the 1955 International Fantasy Award winner, and I recommend it unhesitatingly to every reader. It is basically the story of the remnants of the Martian race, who fled their dying planet some 30,000 of our years ago and who still live here in secret subterranean cities, observing benevolently the progress of Man, and occasionally lending a helping hand to guide him to maturity. Opposing this destiny are a few renegades, the Abdicators, one of whom, Namir, is the protagonist of evil in this particular episode of the Observers. The conflict is for the very soul of a crippled American boy, Angelo Pontevecchio, whose potential genius may be of importance in humanity's progress. His life is tangled with that of Sharon Brand, a little girl of quaint speech who fulfills her own destiny of beauty and music, but with a heart-breaking aftermath. Reporting the events to his superior is the long-lived Martian Observer, Elmis, the appointed guardian angel who is most humanly fallible. In his several human disguises, he takes active

part in the often exciting events which lead ultimately to the decimation of the human race by a germ-mutation plague before Namir is vanquished, and Angelo and Sharon can share a modified happiness. Above all it is the tender commiseration for humanity and the understanding objectivity of Elmis himself that makes the book, in my opinion, a masterpiece of fantasy. The author has a sense of humour, thank goodness, and his musical knowledge enhances the minor background details of which Mr. Pangborn himself is no mean Observer.

Ward Moore is another writer of distinction (remember *Greener Than You Think*?) and his **Bring The Jubilee** (Heinemann, 9/6d.) also won acclaim when it was well voted in the 1953 Fantasy Award with its American book publication following its appearance in the *Magazine of Fantasy and Science Fiction*. It makes ingenious use of the 'worlds of if' theme; in this instance *if* the Confederate States had won the American Civil War. In convincing style and fascinating detail, Mr. Moore tells just how differently America (and the world) might have developed. Hodge Backmaker is a youngster of seventeen in 1938 who rebels against the stultifying life in a United States blighted by the exacting demands of the victorious Confederates. Life in general is poor and hard; employment means indenture to one of big companies, the alternative is service in the Confederate Legion. Gangsterism flourishes and technological development has yielded little beyond the steam-train. Apart from minibiles, horse drawn-vehicles and flying balloons are the modes of transport. After many adventures Hodge joins a self-supporting settlement of scientific enlightenment and is able to indulge his chosen career as an historian. Out of this gathered talent emerges a time-travel device, enabling Hodge to cap his brilliant history of the Civil War (as it took place in the other time-continuum), by actually being present at crucial Gettysburg, where his dramatic intervention changes the course of history and provides the beautiful story twist. Ward Moore brings to this unconventional fantasy a competent novelist's ability to combine sound characterisation with engrossing story telling. Highly recommended.

An author who never fails to thrill the imagination, either in ingeniously contrived thrillers or in consistently scintillating science-fiction, is Fredric Brown whose new collection of short stories is called **Angels And Spaceships** (Victor Gollancz, 10/6d.). Here is entertainment for all tastes, with eight examples of unclassifiable science-fiction and zany humour, ranging from the linotype machine which came to life ("Etaoin Shrdlu") to the Celestial Compositor who made spelling mistakes and considerably upset the life of an Earthling ("The Angelic

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Angleworm "). Or perhaps you will prefer " The Waveries " which deprived the world of electricity and revealed an unexpectedly attractive new way of life ? Or " The Yehudi Principle," based on the well-known little man who wasn't there ? And all the other firm favourites from the pages of *Astounding* and the late revered *Unknown Worlds*. Or you may settle, with deep satisfaction as I did, for the extra, brand-new for this book, nine vignettes of a few hundred words each, all mind-jolting in their varied distillations of supreme fantasy. Spine-chillers or drollery, warm emotion or whimsy, Brown does it better than anyone else, and throws in his own speciality as master of the twist-ending. Don't miss this one.

Another collection of short stories, by American author Philip K. Dick, is a surprise offering, being I think the first hard cover publication of a writer who deserves to be more widely known. **A Handful Of Darkness** (Rich & Cowan, 10/6d.) contains fifteen pieces in which evenness of writing is secondary to new plot-twists and punch-line endings (several rely desperately on nothing else). The influences of Collier and Bradbury are equally evident in " The Little Movement," " The Builder," " Expendable " and " The Cookie Lady," but Dick excels in his own individual style of combining scientific implausibilities with mounting suspense or horror (such as in " Colony," " Impostor," " Progeny," and " Upon the Dull Earth.") and in near-normal stories like " Prominent Author," " The Impossible Planet," " Planet for Transients," and " Exhibition Piece." Two oddities, " The Preserving Machine " and " The Indefatigable Frog," seemed ineffectual, but there's a beautiful tongue-in-cheek dig at the perpetrator of dianetics in " The Turning Wheels." If you like the unusual in science-fantasy try this excellent collection.

A new English author tries his hand at space-opera in the E. E. Smith style, and within its limitations (literary, not spatial) does remarkably well. Silas Water, in **The Man With Absolute Motion** (Rich & Cowan, 9/6d) switches from an airily contrived setting involving the problems of star-systems, galaxies, metagalaxies, even universes—all subdivisions of an inhabited cosmos—to an Earth thousands of years in the future. The particular problem of this inconsiderable mote is merely death of the human species by sterility, nearly everybody, it seems, being last-stage neurotics. An exception, one Erle Bertron, leaves his job as a star-attraction " normal " in a planetary circus for the metagalactic centre so that his unique talent for perception of the somewhat obscure " absolute motion " can be used for saving the universe, which is running down for lack of energy sources (and inter-galactic skullduggery). The yarn is packed with alien creatures, action

and romance, and if your credibility will stand for it, provides acceptable entertainment.

Alec Brown's **Angelo's Moon** (The Bodley Head, 9/6d) is a tedious, long-winded novel based on a slender plot. The idea is sound science-fiction — a highly integrated subterranean city state, Hypolitania, has grown out of an atomic cataclysm which has left the rest of the Earth heir to the Primitives, who are hirsute giants, like you or me, and lead a near-normal pre-cataclysm life much to the disgust of the Hypoli-tanians, much regimented and superior, but who now face a famine owing to a biological reversal which threatens the raw material for their synthetic foods. A scientist, Angelo Gardiner, is brought to Hypolitania from space-satellite duty, in the hope that a fresh mind can solve the problem of the inimical vegetation which is engulfing their surface cultivation (roughly what used to be the Mediterranean area). In the end the answer is given by the Primitives (some good old Londoners) but even the strange weapon provided cannot save Hypolitania from toppling, and its basically unsound blind-alley civilization finally dissolves in horrible destruction of its twenty million citizens. Angelo goes back to his "Moon" to record the events for posterity. The trouble with Alec "Angelo" Brown is that his story is more than a little obscure, and the pedantic dialogue and sesquipeda-

lian writing increased the difficulty in following the story. Other points of irritation are the frequent use of footnotes, faintly absurd back-ground details, which negate their intended effect, whilst the characters, despite an heroic attempt to depict a possible development of mankind in the postulated circumstances, are extremely unconvincing.

The blurb of John Robert Haynes' **Scream From Outer Space** (Rich & Cowan, 8/6d) acclaims this ' space-fiction author ' as one "who shuns the obscenely horrific, without, in any way, sacrificing such essential qualities as a highly imaginative plot, exciting action and sound characterisation." I beg to differ. Briefly and distastefully, the story relates the unlikely adventures of some Earth people who journey to the planet Diana (which has joined our Solar System) to track down the source of beamed UHF signals which are mentally affecting some individual Terrans, including the beautiful Rachel Crawford who joins the expedition. They meet on Diana a race of giant bird-people who are threatened with invasion by enormous wolf-men from yet another wandering planet. The Earthmen destroy the wolf-men in a gorily-described battle, and return to Earth where Rachel weds a character she left behind at the beginning of the story. To what lower depths can such writing sink in the name of science-fiction?

In contrast Charles Carr is a much improved author in his second novel **Salamander War** (Ward Lock, 9/6d). This sequel to his execrable *Colonists of Space* is readable. The story is simple but effective, the dialogue is less banal and the level of characterisation higher. The survivors of the human race have now settled on the twilight belt of the planet Bel, although the crew and passengers of the " Colonist " form a separate and dependent group, barely tolerated by the dour, pacifist, original Swiss pioneers. A crisis looms in the form of attack on the great oxygen plants (by which life on Bel is made possible). The enemy is a strange form of life from the hot side of Bel—eerie heat-creatures who are named after the mythological salamanders. These, with their ' heat-devils ' and ' fire-balls ' nearly overwhelm the colonists, but salvation lies in the pugnacious attributes of the " Colonist " members. Their leaders instigate defences against the salamanders, and by achieving a mutual alliance with their suspicious and temperamentally different hosts, finally take the offensive and drive the salamanders back to their own territory. Credible action and an incidental romance lend a semblance of realism to this unpretentious but reasonably competent book.

Leslie Flood

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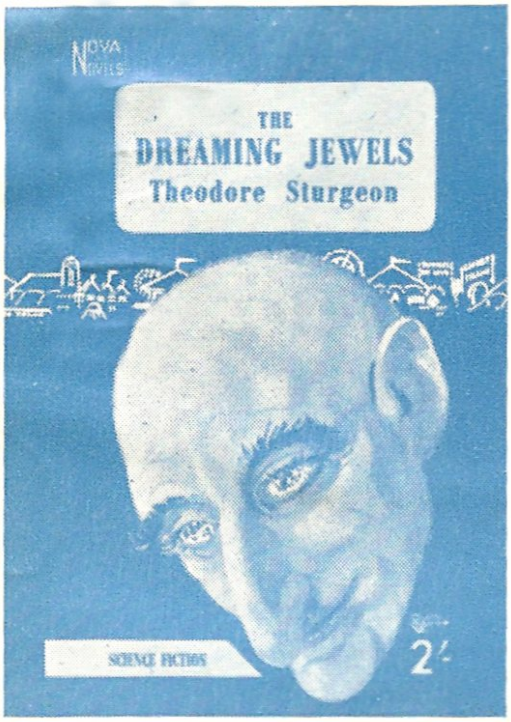

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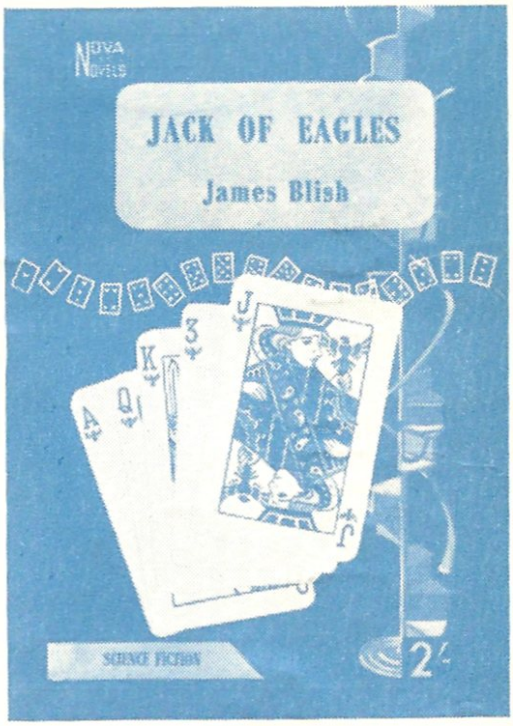

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