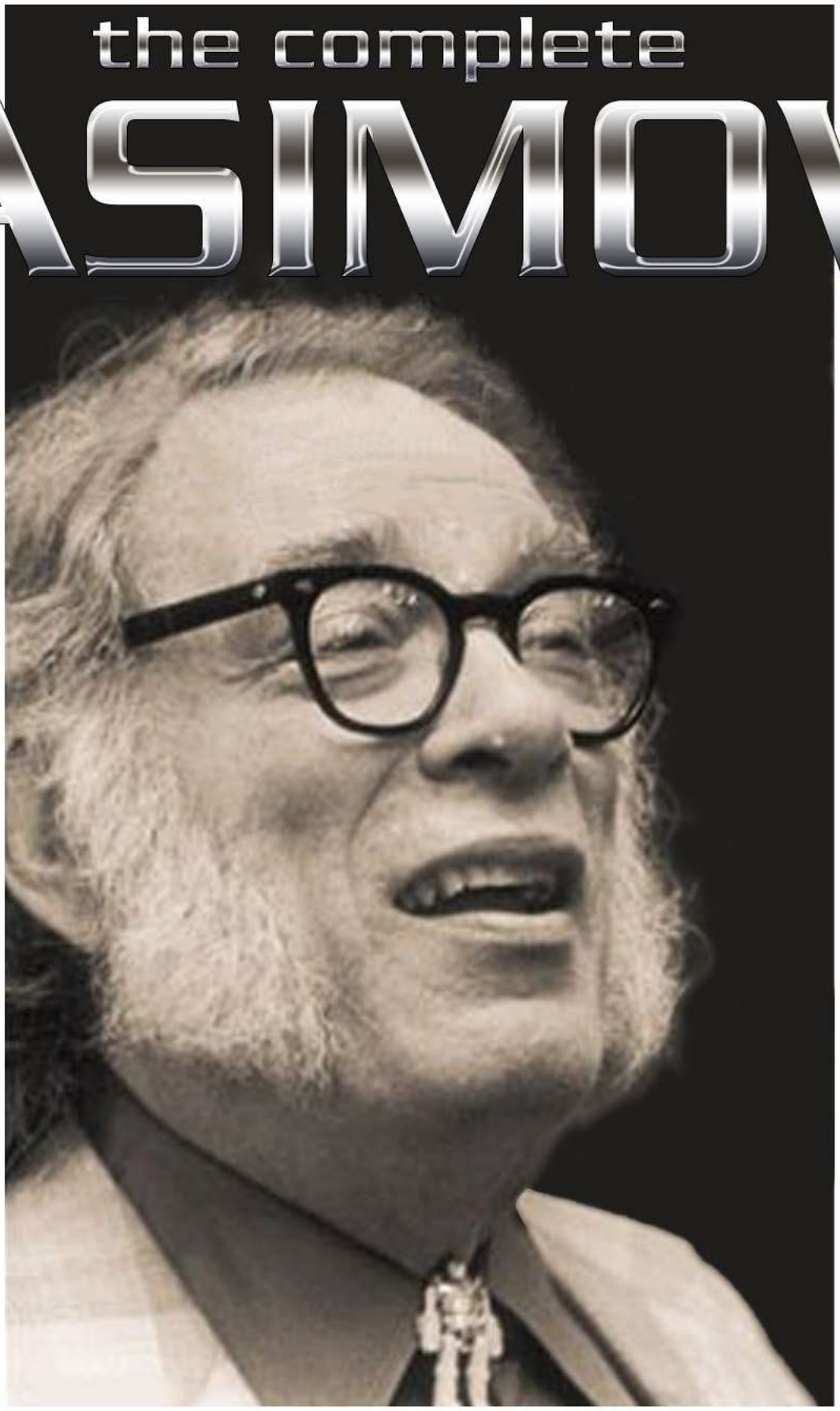
the complete ASIMOV



a compilation by ff

THE EARLY ASIMOV

To the memory of

John Wood Campbell, Jr. (1910-71)

for reasons that this book will make amply obvious

Although I have written over a hundred and twenty books, on almost every subject from astronomy to Shakespeare and from mathematics to satire, it is probably as a science fiction writer that I am best known.

I began as a science fiction writer, and for the first eleven years of my literary career I wrote nothing but science fiction stories, for magazine publication only—and for minute payment. The thought of actually publishing honest-to-goodness books never entered my essentially humble mind.

But the time came when I did begin to produce books, and then I began to gather together the material I had earlier written for magazines. Between 1950 and 1969, ten collections appeared (all of which were published by Doubleday).

These contained eighty-five stories (plus four pieces of comic verse) originally intended for, and published in, the science fiction magazines. Nearly a quarter of them came from those first eleven years.

For the record, these books are:

I, ROBOT (1950)
FOUNDATION (1951)
FOUNDATION AND EMPIRE (1952)
SECOND FOUNDATION (1953)
THE MARTIAN WAY AND OTHER STORIES (1955)
EARTH IS ROOM ENOUGH (1957)
NINE TOMORROWS (1959)
THE REST OF THE ROBOTS (1964)
ASIMOV'S MYSTERIES (1968)
NIGHTFALL AND OTHER STORIES (1969)

It might be argued that this was quite enough, but in arguing so, one is omitting the ravenous appetites of my readers (bless them!). I am constantly getting letters requesting lists of ancient stories out of me so that the letter writers can haunt second-hand shops for old magazines. There are people who prepare bibliographies of my science fiction (don't ask me why) and who want to know all sorts of half-forgotten details concerning them. They even grow distinctly angry when they find that some early stories

were never sold and no longer exist. They want those, too, apparently, and seem to think I have negligently destroyed a natural resource.

So when Panther Books, in England, and Doubleday suggested that I make a collection of those of my early stories not already collected in the ten books listed above, with the literary history of each, I could resist no further. Everyone who has ever met me knows just how amenable to flattery I am, and if you think I can withstand this kind of flattery for more than half a second (as a rough estimate), you are quite wrong.

Fortunately I have a diary, which I have been keeping since January 1, 1938 (the day before my eighteenth birthday); it can give me dates and details.

I began to write when I was very young—eleven, I think. The reasons are obscure, I might say it was the result of an unreasoning urge, but that would just indicate I could think of no reason.

Perhaps it was because I was an avid reader in a family that was too poor to afford books, even the cheapest, and besides, a family that considered cheap books unfit reading. I had to go to the library (my first library card was obtained for me by my father when I was six years old) and make do with two books per week.

This was simply not enough, and my craving drove me to extremes. The diary began as the sort of thing a teen-ager would write, but it quickly degenerated to a simple kind of literary record. It is, to anyone but myself, utterly boring—so boring, in fact, that I leave it around for anyone who wishes, to read. No one ever reads more than two pages. Occasionally someone asks me if I have never felt that my diary ought to record my innermost feelings and emotions, and my answer is always, "No. Never!"

After all, what's the point of being a writer if I have to waste my innermost feelings and emotions on a mere diary? At the beginning of each school term, I eagerly read through every schoolbook I was assigned, going from cover to cover like a personified conflagration. Since I was blessed with a tenacious memory and with instant recall, that was all the studying I had to do for that school term, but I was through before the week was over, and then what? So, when I was eleven, it occurred to me that if I wrote my own books, I could then reread them at my leisure. I never really wrote a complete book, of course. I would start one and keep rambling on with it till I outgrew it and then I would start another. All these early writings are forever gone, though I remember some of the details quite clearly.

In the spring of 1934 I took a special English course given at my high school (Boys' High School in Brooklyn) that placed the accent on writing. The teacher was also faculty adviser for the semi-annual literary magazine put out by the students, and it was his intention to gather material. I took that course.

It was a humiliating experience. I was fourteen at the time, and a rather green and innocent fourteen. I wrote trifles, while everyone else in the class (who were sixteen apiece) wrote sophisticated, tragic mood pieces. All of them made no particular secret of their scorn for me, and though I resented it bitterly there was nothing I could do about it.

For a moment I thought I had them when one of my products was accepted for the semi-annual literary magazine while many of theirs were rejected. Unfortunately the

teacher told me, with callous insensitivity, that mine was the only item submitted that was humorous and that since he had to have one non-tragic piece he was forced to take it.

It was called "Little Brothers," dealt with the arrival of my own little brother five years earlier, and was my first piece of published material of any kind. I suppose it can be located in the records at Boys' High, but I don't have it Sometimes I wonder what happened to all those great tragic writers in the class. I don't remember a single name and I have no intention of ever trying to find out—but I sometimes wonder.

It was not until May 29, 1937 (according to a date I once jotted down—though that was before I began my diary, so I won't swear to it), that the vague thought occurred to me that I ought to write something for professional publication; something that would be paid for! Naturally it would have to be a science fiction story, for I had been an avid science fiction fan since 1929 and I recognized no other form of literature as in any way worthy of my efforts.

The story I began to compose for the purpose, the first story I ever wrote with a view to becoming a "writer," was entitled "Cosmic Corkscrew."

In it I viewed time as a helix (that is, something like a bedspring). Someone could cut across from one turn directly to the next, thus moving into the future by some exact interval but being incapable of travelling one day less into the future.

My protagonist made the cut across time and found the Earth deserted. All animal life was gone; yet there was every sign that life had existed until very shortly before—and no indication at all of what had brought about the disappearance. It was told in the first person from a lunatic asylum, because the narrator had, of course, been placed in a madhouse after he returned and tried to tell his tale.

I wrote only a few pages in 1937, then lost interest. The mere fact that I had publication in mind must have paralyzed me. As long as something I wrote was intended for my own eyes only, I could be carefree enough. The thought of possible other readers weighed down heavily upon my every word.

—So I abandoned it.

Then, in May 1938, the most important magazine in the field. Astounding Science Fiction, changed its publication schedule from the third Wednesday of the month to the fourth Friday. When the June issue did not arrive on its accustomed day, I went into a decline.

By May 17, I could stand it no more and took the subway to 79 Seventh Avenue, where the publishing house. Street & Smith Publications, Inc., was then located. There, an official of the firm informed me of the changed schedule, and on May 19, the June issue arrived. The near brush with doom, and the ecstatic relief that followed, reactivated my desire to write and publish. I returned to "Cosmic Corkscrew" and by June 19 it was finished.

I told this story in some detail in an article entitled "Portrait of the Writer as a Boy," which was included as Chapter 17 of my book of essays Science, Numbers and I (Doubleday, 1968).

In it, relying on memory alone, I said that I had called Street & Smith on the phone. When I went back to my diary to check actual dates for this book, I was astonished to discover that I had actually made the subway trip—an utterly daring venture for me in those days, and a measure of my desperation.

The next question was what to do with it. I had absolutely no idea what one did with a manuscript intended for publication, and no one I knew had any idea either. I discussed it with my father, whose knowledge of the real world was scarcely greater than my own, and he had no idea either.

But then it occurred to me that, the month before, I had gone to 79 Seventh Avenue merely to inquire about the non-appearance of Astounding. I had not been struck by lightning for doing so. Why not repeat the trip, then, and hand in the manuscript in person? The thought was a frightening one. It became even more frightening when my father further suggested that necessary preliminaries included a shave and my best suit. That meant I would have to take additional time, and the day was already wearing on and I would have to be back in time to make the afternoon newspaper delivery. (My father had a candy store and newsstand, and life was very complicated in those days for a creative writer of artistic and sensitive bent such as myself. For instance, we lived in an apartment in which all the rooms were in a line and the only way of getting from the living room to the bedroom of my parents, or of my sister, or of my brother, was by going through my bedroom. My bedroom was therefore frequently gone through, and the fact that I might be in the throes of creation meant nothing to anyone.) I compromised. I shaved, but did not bother changing suits, and off I went. The date was June 21, 1938.

I was convinced that, for daring to ask to see the editor of Astounding Science Fiction, I would be thrown out of the building bodily, and that my manuscript would be torn up and thrown out after me in a shower of confetti. My father, however (who had lofty notions) was convinced that a writer—by which he meant anyone with a manuscript—would be treated with the respect due an intellectual. He had no fears at all— but I was the one who had to go into the building.

Trying to mask panic, I asked to see the editor. The girl behind the desk (I can see the scene in my mind's eye right now exactly as it was) spoke briefly on the phone and said, "Mr. Campbell will see you."

She directed me through a large, loft like room filled with huge rolls of paper and enormous piles of magazines and permeated with the heavenly smell of pulp (a smell that, to this day, will recall my youth in aching detail and reduce me to tears of nostalgia). And there, in a small room on the other side, was Mr. Campbell.

John Wood Campbell, Jr., had been working for Street & Smith for a year and had taken over sole command of Astounding Stories (which he had promptly renamed Astounding Science Fiction) a couple of months earlier. He was only twenty-eight years old then. Under his own name and under his pen name, Don A. Stuart, he was one of the most famous and highly regarded authors of science fiction, but he was about to bury his writing reputation forever under the far greater renown he was to gain as editor.

He was to remain editor of Astounding Science Fiction and of its successor, Analog Science Fact—Science Fiction, for a third of a century. During all that time, he and I were to remain friends, but however old I grew and however venerable and respected a star of our mutual field I was to become, I never approached him with anything but that awe he inspired in me on the occasion of our first meeting.

He was a large man, an opinionated man, who smoked and talked constantly, and who enjoyed, above anything else, the production of outrageous ideas, which he bounced off his listener and dared him to refute. It was difficult to refute Campbell even when his ideas were absolutely and madly illogical.

We talked for over an hour that first time. He showed me forthcoming issues of the magazine (actual future issues in the cellulose-flesh). I found he had printed a 'fan letter of mine in the issue about to be published, and another in the next—so he knew the genuineness of my interest.

He told me about himself, about his pen name and about his opinions. He told me that his father had sent in one of his manuscripts to Amazing Stories when he was seventeen and that it would have been published but the magazine lost it and he had no carbon. (I was ahead of him there. I had brought in the story myself and I had a carbon.) He also promised to read my story that night and to send a letter, whether acceptance or rejection, the next day. He promised also that in case of rejection he would tell me what was wrong with it so I could improve.

He lived up to every promise. Two days later, on June 23, I heard from him. It was a rejection. (Since this book deals with real events and is not a fantasy—you can't be surprised that my first story was instantly rejected.) Here is what I said in my diary about the rejection: "At 9:30 I received back 'Cosmic Corkscrew' with a polite letter of rejection. He didn't like the slow beginning, the suicide at the end."

Campbell also didn't like the first-person narration and the stiff dialog, and further pointed out that the length (nine thousand words) was inconvenient—too long for a short story, too short for a novelette. Magazines had to be put together like jigsaw puzzles, you see, and certain lengths for individual stories were more convenient than others.

By that time, though, I was off and running. The joy of having spent an hour and more with John Campbell, the thrill of talking face to face and on even terms with an idol, had already filled me with the ambition to write another science fiction story, better than the first, so that I could try him again. The pleasant letter of rejection—two full pages—in which he discussed my story seriously and with no trace of patronization or contempt, reinforced my joy. Before June 23 was over, I was halfway through the first draft of another story.

Many years later I asked Campbell (with whom I had by then grown to be on the closest terms) why he had bothered with me at all, since that first story was surely utterly impossible.

"It was," he said frankly, for he never flattered. "On the other hand, I saw something in you. You were eager and you listened and I knew you wouldn't quit no

matter how many rejections I handed you. As long as you were willing to work hard at improving, I was willing to work with you."

That was John. I wasn't the only writer, whether newcomer or old-timer, that he was to work with in this fashion. Patiently, and out of his own enormous vitality and talent, he built up a stable of the best s.f. writers the world had, till then, ever seen.

What happened to "Cosmic Corkscrew" after that I don't really know. I abandoned it and never submitted it anywhere else. I didn't actually tear it up and throw it away; it simply languished in some desk drawer until eventually I lost track of it. In any case, it no longer exists.

This seems to be one of the main sources of discomfort among the archivists—they seem to think the first story I ever wrote for publication, however bad it might have been, was an important document. All I can say, fellows, is that I'm sorry but there was no way of my telling in 1938 that my first try might have historic interest someday. I may be a monster of vanity and arrogance, but I'm not that much a monster of vanity and arrogance.

Besides, before the month was out I had finished my second story, "Stowaway," and I was concentrating on that. I brought it to Campbell's office on July 18, 1938, and he was just a trifle slower in returning it, but the rejection came on July 22.

I said in my diary concerning the letter that accompanied it: ". . . it was the nicest possible rejection you could imagine.

Indeed, the next best thing to an acceptance. He told me the idea was good and the plot passable. The dialog and handling, he continued, were neither stiff nor wooden (this was rather a delightful surprise to me) and that there was no one particular fault but merely a general air of amateurishness, constraint, forcing. The story did not go smoothly. This, he said, I would grow out of as soon as I had had sufficient experience.

He assured me that I would probably be able to sell my stories but it meant perhaps a year's work and a dozen stories before I could click. . . "

It is no wonder that such a "rejection letter" kept me hotly charged with enormous enthusiasm to write, and I got promptly to work on a third story.

What's more, I was sufficiently encouraged to try to submit "Stowaway" elsewhere. In those days there were three science fiction magazines on the stands. Astounding was the aristocrat of the lot, a monthly with smooth edges and an appearance of class. The other two. Amazing Stories and Thrilling Wonder Stories, were somewhat more primitive in appearance and printed stories, with more action and less sophisticated plots. I sent "Stowaway" to Thrilling Wonder Stories, which, however, also rejected it promptly on August 9, 1938 (with a form letter).

By then, though, I was deeply engaged with my third story, which, as it happened, was fated to do better—and do it faster. In this book, however, I am including my stories not in the order of publication but in order of writing—which I presume is more significant from the standpoint of literary development. Let me stay with "Stowaway," therefore.

In the summer of 1939, by which time I had gained my first few successes, I returned to "Stowaway," refurbished it somewhat, and tried Thrilling Wonder Stories

again. Undoubtedly I had a small suspicion that the new luster of my name would cause them to read it with a different attitude than had been the case when I was a complete unknown. I was quite wrong. It was rejected again.

Then I tried Amazing, and again it was rejected.

That meant the story was dead, or would have meant so were it not for the fact that science fiction was entering a small "boom" as the 1930s approached their end. New magazines were being founded, and toward the end of 1939, plans were made to publish a magazine to be called Astonishing Stories, which would retail for the price of ten cents. Astounding cost twenty cents an issue.) The new magazine, together with a sister magazine, Super Science Stories, were to be edited on a shoestring by a young science fiction fan, Frederic Pohl, who was then just turning twenty (he was about a month older than myself), and who, in this way, made his entry into what was to be a distinguished professional career in science fiction.

Pohl was a thin, soft-spoken young man, with hair that was already thinning, a solemn face, and a pronounced overbite that gave him a rabbity look when he smiled. The economic facts of his life kept him out of college, but he was far brighter (and knew more) than almost any college graduate I've ever met.

Pohl was a friend of mine (and still is) and perhaps did more to help me start my literary career than anyone except, of course, Campbell himself. We had attended fan-club meetings together. He had read my manuscripts and praised them —and now he needed stories in a hurry, and at low rates, for his new magazines.

He asked to look through my manuscripts again. He began by choosing one of my stories for his first issue. On November 17, 1939, nearly a year and a half after "Stowaway" was first written, Pohl selected it for inclusion in his second issue of Astonishing. He was an inveterate title changer, however, and he plastered "The Callistan Menace" on the story and that was how it was published.

So here it is, the second story I ever wrote and the earliest story to see professional publication. The reader can judge for himself whether Campbell's critique, given above, was overly kind and whether he was justified in foreseeing a professional writing career for me on the basis of this story.

"The Callistan Menace" appears here (as will all the stories in this volume) exactly as it appeared in the magazine with only the editing and adjustment required to correct typographical errors.

THE CALLISTAN MENACE

Astonishing Stories, April 1940

"Damn Jupiter!" growled Ambrose Whitefield viciously, and I nodded agreement.

"I've been on the Jovian satellite run," I said, "for fifteen years and I've heard those two words spoken maybe a million times. It's probably the most sincere curse in the Solar System."

Our watch at the controls of the scout ship Ceres had just been relieved and we descended the two levels to our room with dragging steps.

"Damn Jupiter—and damn it again," insisted Whitefield morosely. "It's too big for the System. It stays out there behind us and pulls and pulls and pulls! We've got to keep the Atomos firing all the way. We've got to check our course— completely-—every hour. No relaxation, no coasting, no taking it easy! nothing but the rottenest kind of work."

There were tiny beads of perspiration on his forehead and he swabbed at them with the back of his hand. He was a young fellow, scarcely thirty, and you could see in his eyes that he was nervous, and even a little frightened.

And it wasn't Jupiter that was bothering him, in spite of his profanity. Jupiter was the least of our worries. It was Callisto! It was that little moon which gleamed a pale blue upon our visiplates that made Whitefield sweat and that had spoiled four nights' sleep for me already. Callisto! Our destination! Even old Mac Steeden, gray mustachioed veteran who, in his youth, had sailed with the great Peewee Wilson himself, went about his duties with an absent stare. Four days out— and ten days more ahead of us—and panic was reaching out with clammy fingers.

We were all brave enough in the ordinary course of events.

The eight of us on the Ceres had faced the purple Lectronics and stabbing Disintos of pirates and rebels and the alien environments of half a dozen worlds. But it takes more than run-of-the-mill bravery to face the unknown; to face Callisto, the "mystery world" of the Solar System.

One fact was known about Callisto—one grim, bare fact.

Over a period of twenty-five years, seven ships, progressively better equipped, had landed—and never been heard from again. The Sunday supplements peopled the satellite with anything from super-dinosaurs to invisible ghosts of the fourth dimension, but that did not solve the mystery.

We were the eighth. We had a better ship than any of those preceding. We were the first to sport the newly-developed beryl-tungsten hull, twice as strong as the old steel shells. We possessed super-heavy armaments and the very latest Atomic Drive engines.

Still—we were only the eighth, and every man jack of us knew it.

Whitefield entered our quarters silently and flopped down upon his bunk. His fists were clenched under his chin and showed white at the knuckles. It seemed to me that he wasn't far from the breaking point. It was a case for careful diplomacy.

"What we need," said I, "is a good, stiff drink."

"What we need," he answered harshly, "is a hell of a lot of good, stiff drinks."

"Well, what's stopping us?"

He looked at me suspiciously, "You know there isn't a drop of liquor aboard ship. It's against Navy regulations!"

"Sparkling green Jabra water," I said slowly, letting the words drip from my mouth. "Aged beneath the Martian deserts. Melted emerald juice. Bottles of it! Cases of it!"

"Where?"

"I know where. What do you say? A few drinks—just a few—will cheer us both up."

For a moment, his eyes sparkled, and then they dulled again, "What if the Captain finds out? He's a stickler for discipline, and on a trip like this, it's liable to cost us our rating."

I winked and grinned, "It's the Captain's own cache. He can't discipline us without cutting his own throat—the old hypocrite. He's the best damn Captain there ever was, but he likes his emerald water."

Whitefield stared at me long and hard, "All right. Lead me to it."

We slipped down to the supply room, which was deserted, of course. The Captain and Steeden were at the controls; Brock and Charney were at the engines; and Harrigan and Tuley were snoring their fool heads off in their own room.

Moving as quietly as I could, through sheer habit, I pushed aside several crates of food tabs and slid open a hidden panel near the floor. I reached in and drew out a dusty bottle, which, in the dim light, sparkled a dull sea-green.

"Sit down," I said, "and make yourself comfortable." I produced two tiny cups and filled them.

Whitefield sipped slowly and with every evidence of satisfaction. He downed his second at one gulp.

"How come you volunteered for this trip, anyway, Whitey?"

I asked, "You're a little green for a thing like this."

He waved his hand, "You know how it is. Things get dull after a while. I went in for zoology after getting out of college—big field since interplanetary travel—and had a nice comfortable position back on Ganymede. It was dull, though; I was bored blue. So I joined the Navy on an impulse, and on another I volunteered for this trip." He sighed ruefully, "I'm a little sorry I did."

"That's not the way to take it, kid. I'm experienced and I know. When you're panicky, you're as good as licked. Why, two months from now, we'll be back on Ganymede."

"I'm not scared, if that's what you're thinking," he exclaimed angrily. "It's—it's," there was a long pause in which he frowned at his third cupful. "Well, I'm just worn out

trying to imagine what the hell to expect. My imagination is working overtime and my nerves are rubbing raw."

"Sure, sure," I soothed, "I'm not blaming you. It's that way with all of us, I guess. But you have to be careful. Why, I remember once on a Mars-Titan trip, we had—"

Whitefield interrupted what was one of my favorite yarns— and I could spin them as well as anyone in the service—with a jab in the ribs that knocked the breath out of me.

He put down his Jabra gingerly.

"Say, Jenkins," he stuttered, "I haven't downed enough liquor to be imagining things, have I?"

"That depends on what you imagined."

"I could swear I saw something move somewhere in the pile of empty crates in the far corner."

"That's a bad sign," and I took another swig as I said it.

"Your nerves are going to your eyes and now they're going back on you. Ghosts, I suppose, or the Callistan menace looking us over in advance."

"I saw it, I tell you. There's something alive there." He edged towards me—his nerves were plenty shot—and for a moment, in the dim, shadowy light even I felt a bit choked up.

"You're crazy," I said in a loud voice, and the echoes calmed me down a bit. I put down my empty cup and got up just a wee bit unsteadily. "Let's go over and poke through the crates."

Whitefield followed me and together we started shoving the light aluminum cubicles this way and that. Neither of us was quite one hundred per cent sober and we made a fair amount of noise. Out of the corner of my eye, I could see Whitefield trying to move the case nearest the wall.

"This one isn't empty," he grunted, as it lifted very slightly off the floor.

Muttering under his breath, he knocked off the cover and looked in. For a half second he just stared and then he backed away slowly. He tripped over something and fell into a sitting position, still gaping at the case.

I watched his actions with raised eyebrows, then glanced hastily at the case in question. The glance froze into a steady glare, and I emitted a hoarse yell that rattled off each of the four walls.

A boy was sticking his head out of the case—a red-haired dirty-faced kid of thirteen or thereabouts.

"Hello," said the boy as he clambered out into the open.

Neither of us found the strength to answer him, so he continued, "I'm glad you found me. I was getting a cramp in my shoulder trying to curl up in there."

Whitefield gulped audibly, "Good God! A kid stowaway! And on a voyage to Callisto!"

"And we can't turn back," I reminded in a stricken voice, "without wrecking ourselves. The Jovian satellite run is poison."

"Look here," Whitefield turned on the kid in a sudden belligerence. "Who are you, you young nut, and what are you doing here?"

The kid flinched. "I'm Stanley Fields," he answered, a bit scared. "I'm from New Chicago on Ganymede. I—I ran away to space, like they do in books." He paused and then asked brightly, "Do you think we'll have a fight with pirates on this trip, mister?"

There was no doubt that the kid was filled to the brim with "Dime Spacers." I used to read them myself as a youngster.

"How about your parents?" asked Whitefield, grimly.

"Oh, all I got 's an uncle. He won't care much, I guess." He had gotten over his first uneasiness and stood grinning at us.

"Well, what's to be done?" said Whitefield, looking at me in complete helplessness.

I shrugged, "Take him to the Captain. Let him worry."

"And how will he take it?"

"Anyway he wants. It's not our fault. Besides, there's absolutely nothing to be done about the mess."

And grabbing an arm apiece, we walked away, dragging the kid between us.

Captain Bartlett is a capable officer and one of the deadpan type that very rarely displays emotion. Consequently, on those few occasions when he does, it's like a Mercurian volcano in full eruption—and you haven't lived until you've seen one of those.

It was a case of the final straw. A satellite run is always wearing. The image of Callisto up ahead was harder on him than on any member of the crew. And now there was this kid stowaway.

It wasn't to be endured! For half an hour, the Captain shot off salvo after salvo of the very worst sort of profanity. He started with the sun and ran down the list of planets, satellites, asteroids, comets, to the very meteors themselves. He was starting on the nearer fixed stars, when he collapsed from sheer nervous exhaustion. He was so excited that he never thought to ask us what we were doing in the storeroom in the first place, and for that Whitefield and I were duly grateful.

But Captain Bartlett is no fool. Having purged his system of its nervous tension, he saw clearly that that which cannot be cured must be endured.

"Someone take him and wash him up," he growled wearily, "and keep him out of my sight for a while." Then, softening a bit, he drew me towards him, "Don't scare him by telling him where we're going. He's in a bad spot, the poor kid."

When we left, the old soft-hearted fraud was sending through an emergency message to Ganymede trying to get in touch with the kid's uncle.

Of course, we didn't know it at the time, but that kid was a Godsend—a genuine stroke of Old Man Luck. He took our minds off Callisto. He gave us something else to think about.

The tension, which at the end of four days had almost reached the breaking point, eased completely.

There was something refreshing in the kid's natural gayety; in his bright ingenuousness. He would meander about the ship asking the silliest kind of questions. He insisted on expecting pirates at any moment. And, most of all, he persisted in regarding each and every one of us as "Dime Spacer" heroes.

That last nattered our egos, of course, and put us on our mettle. We vied with each other in chest-puffing and taletelling, and old Mac Steeden, who in Stanley's eyes was a demi-god, broke the all-time record for plain and fancy lying.

I remember, particularly, the talk-fest we had on the seventh day out. We were just past the midpoint of the trip and were set to begin a cautious deceleration. All of us (except Harrigan and Tuley, who were at the engines) were sitting in the control room. Whitefield, with half an eye on the Mathematico, led off, and, as usual, talked zoology.

"It's a little slug-like thing," he was saying, "found only on Europa. It's called the Carolus Europis but we always referred to it as the Magnet Worm. It's about six inches long and has a sort of a slate-grey color—most disgusting thing you could imagine.

"We spent six months studying that worm, though, and I never saw old Mornikoff so excited about anything before.

You see, it killed by some sort of magnetic field. You put the Magnet Worm at one end of the room and a caterpillar, say, at the other. You wait about five minutes and the caterpillar just curls up and dies.

"And the funny thing is this. It won't touch a frog—too big; but if you take that frog and put some sort of iron band about it, that Magnet Worm kills it just like that. That's why we know it's some type of magnetic field that does it—the presence of iron more than quadruples its strength."

His story made quite an impression on us. Joe Brock's deep bass voice sounded, "I'm damn glad those things are only four inches long, if what you say is right."

Mac Steeden stretched and then pulled at his grey mustachios with exaggerated indifference, "You call that worm unusual. It isn't a patch on some of the things I've seen in my day—." He shook his head slowly and reminiscently, and we knew we were in for a long and gruesome tale. Someone groaned hollowly, but Stanley brightened up the minute he saw the old veteran was in a story-telling mood.

Steeden noticed the kid's sparkling eyes, and addressed himself to the little fellow, "I was with Peewee Wilson when it happened—you've heard of Peewee Wilson, haven't you?"

"Oh, yes," Stanley's eyes fairly exuded hero-worship. "I've read books about him. He was the greatest spacer there ever was."

"You bet all the radium on Titan he was, kid. He wasn't any taller than you, and didn't scale much more than a hundred pounds, but he was worth five times his weight in Venusian Devils in any fight. And me and him were just like that. He never went anyplace but what I was with him. When the going was toughest it was always me that he turned to."

He sighed lugubriously, "I was with him to the very end. It was only a broken leg that kept me from going with him on his last voyage—"

He choked off suddenly and a chilly silence swept over all of us. Whitefield's face went gray, the Captain's mouth twisted in a funny sort of way, and I felt my heart skid all the way down to the soles of my feet.

No one spoke, but there was only one thought among the six of us. Peewee Wilson's last trip had been to Callisto. He had been the second—and had never returned. We were the eighth.

Stanley stared from one to the other of us in astonishment, but we all avoided his eyes.

It was Captain Bartlett that recovered first.

"Say, Steeden, you've got an old spaceship of Peewee Wilson's, haven't you?" His voice was calm and steady but I could see that it took a great deal of effort to keep it so.

Steeden brightened and looked up. He had been chewing at the tips of his mustachios (he always did when nervous) and now they hung downwards in a bedraggled fashion.

"Sure thing. Captain. He gave it to me with his own hand, he did. It was back in '23 when the new steel suits were just being put out. Peewee didn't have any more use for his old vitri-rubber contraption, so he let me have it—and I've kept it ever since. It's good luck for me."

"Well, I was thinking that we might fix up that old suit for the boy here. No other suit 'll fit him, and he needs one bad."

The veteran's faded eyes hardened and he shook his head vigorously, "No sir. Captain. No one touches that old suit Peewee gave it to me himself. With his own hand! It's—it's sacred, that's what it is."

The rest of us chimed in immediately upon the Captain's side but Steeden's obstinacy grew and hardened. Again and again he would repeat tonelessly, "That old suit stays where it is." And he would emphasize the statement with a blow of his gnarled fist.

We were about to give up, when Stanley, hitherto discreetly silent, took a hand.

"Please, Mr. Steeden," there was just the suspicion of a quaver in his voice. "Please let me have it. I'll take good care of it. I'll bet if Peewee Wilson were alive today he'd say I could have it." His blue eyes misted up and his lower lip trembled a bit. The kid was a perfect actor.

Steeden looked irresolute and took to biting his mustachio again, "Well—oh, hell, you've all got it in for me. The kid can have it but don't expect me to fix it up! The rest of you can lose sleep—I wash my hands of it."

And so Captain Bartlett killed two birds with one stone.

He took our minds off Callisto at a time when the morale of the crew hung in the balance and he gave us something to think about for the remainder of the trip—for renovating that ancient relic of a suit was almost a week's job.

We worked over that antique with a concentration out of all proportion to the importance of the job. In its pettiness, we forgot the steadily growing orb of Callisto. We soldered every last crack and blister in that venerable suit. We patched the inside with

close-meshed aluminum wire. We refurbished the tiny heating unit and installed new tungsten oxygen-containers.

Even the Captain was not above giving us a hand with the suit, and Steeden, after the first day, in spite of his tirade at the beginning, threw himself into the job with a will.

We finished it the day before the scheduled landing, and Stanley, when he tried it on, glowed with pride, while Steeden stood by, grinning and twirling his mustachio.

And as the days passed, the pale blue circle that was Callisto grew upon the visiplate until it took up most of the sky. The last day was an uneasy one. We went about our tasks abstractedly, and studiously avoided the sight of the hard, emotionless satellite ahead.

We dived—in a long, gradually contracting spiral. By this maneuvre, the Captain had hoped to gain some preliminary knowledge of the nature of the planet and its inhabitants, but the information gained was almost entirely negative. The large percentage of carbon dioxide present in the thin, cold atmosphere was congenial to plant life, so that vegetation was plentiful and diversified. However, the three per cent oxygen content seemed to preclude the possibility of any animal life, other than the simplest and most sluggish species. Nor was there any evidence at all of cities or artificial structures of any kind.

Five times we circled Callisto before sighting a large lake, shaped something like a horse's head. It was towards that lake that we gently lowered ourselves, for the last message of the second expedition—Peewee Wilson's expedition—spoke of landing near such a lake.

We were still half a mile in the air, when we located the gleaming metal ovoid that was the Phobos, and when we finally thumped softly on to the green stubble of vegetation, we were scarcely five hundred yards from the unfortunate craft.

"Strange," muttered the Captain, after we had all congregated in the control room, waiting for further orders, "there seems to be no evidence of any violence at all."

It was true! The Phobos lay quietly, seemingly unharmed.

Its old-fashioned steel hull glistened brightly in the yellow light of a gibbous Jupiter, for the scant oxygen of the atmosphere could make no rusty inroads upon its resistant exterior.

The Captain came out of a brown study and turned to Charney at the radio.

"Ganymede has answered?"

"Yes, sir. They wish us luck." He said it simply, but a cold shiver ran down my spine.

Not a muscle of the Captain's face flickered. "Have you tried to communicate with the Phobos?"

"No answer, sir."

"Three of us will investigate the Phobos. Some of the answers, at least, should be there."

"Matchsticks" grunted Brock, stolidly.

-The Captain nodded gravely.

He palmed eight matches, breaking three in half, and extended his arm towards us, without saying a word.

Chamey stepped forward and drew first. It was broken and he stepped quietly towards the space-suit rack. Tuley followed and after him Harrigan and Whitefield. Then I, and I drew the second broken match. I grinned and followed Charney, and in thirty seconds, old Steeden himself joined us.

"The ship will be backing you fellows," said the Captain quietly, as he shook our hands. "If anything dangerous turns up, run for it No heroics now, for we can't afford to lose men."

We inspected our pocket Lectronics and left. We didn't know exactly what to expect and weren't sure but that our first steps on Callistan soil might not be our last, but none of us hesitated an instant. In the "Dime Spacers," courage is a very cheap commodity, but it is rather more expensive in real life. And it is with considerable pride that I recall the firm steps with which we three left the protection of the Ceres.

I looked back only once and caught a glimpse of Stanley's face pressed white against the thick glass of the porthole.

Even from a distance, his excitement was only too apparent.

Poor kid! For the last two days he had been convinced we were on our way to clean up a pirate stronghold and was almost dying with impatience for the fighting to begin. Of course, none of us cared to disillusion him.

The outer hull of the Phobos rose before us and overshadowed us with its might. The giant vessel lay in the dark green stubble, silent as death. One of the seven that had attempted and failed. And we were the eighth.

Charney broke the uneasy silence, "What are these white smears on the hull?"

He put up a metal-encased finger and rubbed it along the steel plate. He withdrew it and gazed at the soft white pulp upon it. With an involuntary shudder of disgust, he scraped it off upon the coarse grass beneath.

"What do you think it is?"

The entire ship as far as we could see—except for that portion immediately next the ground—was besmeared by a thin layer of the pulpy substance. It looked like dried foam—like— I said: "It looks like slime left after a giant slug had come out of the lake and slithered over the ship."

I wasn't serious in my statement, of course, but the other two cast hasty looks at the mirror-smooth lake in which Jupiter's image lay unruffled. Charney drew his hand Lectronic.

"Here!" cried Steeden, suddenly, his voice harsh and metallic as it came over the radio, "that's no way to be talking.

We've got to find some way of getting into the ship; there must be some break in its hull somewhere. You go around to the right, Charney, and you, Jenkins, to the left. I'll see if I can't get atop of this thing somehow."

Eyeing the smoothly-round hull carefully, he drew back and jumped. On Callisto; of course, he weighed only twenty pounds or less, suit and all, so he rose upwards some

thirty or forty feet. He slammed against the hull lightly, and as he started sliding downwards, he grabbed a rivet-head and scrambled to the top.

Waving a parting to Chamey at this point, I left.

"Everything all right?" the Captain's voice sounded thinly in my ear.

"All O.K.," I replied gruffly, "so far." And as I said so, the Ceres disappeared behind the convex bulge of the dead Phobos and I was entirely alone upon the mysterious moon.

I pursued my round silently thereafter. The spaceship's "skin" was entirely unbroken except for the dark, staring portholes, the lowest of which were still well above my head.

Once or twice I thought I could see Steeden scrambling monkey-like on top of the smooth hulk, but perhaps that was only fancy.

I reached the prow at last which was bathed in the full light of Jupiter. There, the lowest row of portholes were low enough to see into and as I passed from one to the other, I felt as if I were gazing into a shipful of spectres, for in the ghostly light all objects appeared only as flickering shadows.

It was the last window in the line that proved to be of sudden, overpowering interest. In the yellow rectangle of Jupiter-light stamped upon the floor, there sprawled what remained of a man. His clothes were draped about him loosely and his shirt was ridged as if the ribs below had moulded it into position. In the space between the open shirt collar and engineer's cap, there showed a grinning, eyeless skull. The cap, resting askew upon the smooth skullcase, seemed to add the last refinement of horror to the sight.

A shout in my ears caused my heart to leap. It was Steeden, exclaiming profanely somewhere above the ship. Almost at once, I caught sight of his ungainly steel-clad body slipping and sliding down the side of the ship.

We raced towards him in long, floating leaps and he waved us on, running ahead of us, towards the lake. At its very shores, he stopped and bent over some half-buried object Two bounds brought us to him, and we saw that the object was a space-suited human, lying face downward. Over it was a thick layer of the same slimy smear that covered the Phobos.

"I caught sight of it from the heights of the ship," said Steeden, somewhat breathlessly, as he turned the suited figure over.

What we saw caused all three of us to explode in a simultaneous cry. Through the glassy visor, there appeared a leprous countenance. The features were putrescent, fallen apart, as if decay had set in and ceased because of the limited air supply. Here and there a bit of gray bone showed through.

It was the most repulsive sight I have ever witnessed, though I have seen many almost as bad.

"My God!" Chamey's voice was half a sob. 'They simply die and decay." I told Steeden of the clothed skeleton I had seen through the porthole.

"Damn it, it's a puzzle," growled Steeden, "and the answer must be inside the Phobos." There was a momentary silence, "I tell you what. One of us can go back and get the Captain to dismount the Disintegrator. It ought to be light enough to handle on Callisto, and at low power, we can draw it fine enough to cut a hole without blowing the entire ship to kingdom come. You go, Jenkins. Charney and I will see if we can't find any more of the poor devils."

I set off for the Ceres without further urging, covering the ground in space-devouring leaps. Three-quarters of the distance had been covered when a loud shout, ringing metallically in my ear, brought me to a skidding halt. I wheeled in dismay and remained petrified at the sight before my eyes.

The surface of the lake was broken into boiling foam, and from it there reared the fore-parts of what appeared to be giant caterpillars. They squirmed out upon land, dirty-grey bodies dripping slime and water. They were some four feet long, about one foot in thickness, and their method of locomotion was the slowest of oxygen-conserving crawls. Except for one stalky growth upon their forward end, the tip of which glowed a faint red, they were absolutely featureless.

Even as I watched, their numbers increased, until the shore became one heaving mass of sickly gray flesh.

Charney and Steeden were running towards the Ceres, but less than half the distance had been covered when they stumbled, their run slowing to a blind stagger. Even that ceased, and almost together they fell to their knees.

Charney's voice sounded faintly in my ear, "Get help! My head is splitting. I can't move! I—" Both lay still now.

I started towards them automatically, but a sudden sharp pang just over my temples staggered me, and for a moment I stood confused. Then I heard a sudden unearthly shout from Whitefield, "Get back to the ship, Jenkins! Get back! Get back!"

I turned to obey, for the pain had increased into a continuous tearing pain. I weaved and reeled as I approached the yawning airlock, and I believe that I was at the point of collapse when I finally fell into it. After that, I can recall only a jumble for quite a period.

My next clear impression was of the control-room of the Ceres. Someone had dragged the suit off me, and I gazed about me in dismay at a scene of the utmost confusion. My brain was still somewhat addled and Captain Bartlett as he leant over me appeared double.

"Do you know what those damnable creatures are?" He pointed outwards at the giant caterpillars.

I shook my head mutely.

"They're the great grand-daddies of the Magnet Worm Whitefield was telling us of once. Do you remember the Magnet Worm?"

I nodded, "The one that kills by a magnetic field which is strengthened by surrounding iron."

"Damn it, yes," cried Whitefield, interrupting suddenly.

"I'll swear to it. If it wasn't for the lucky chance that our hull is beryl-tungsten and not steel—like the Phobos and the rest—every last one of us would be unconscious by now and dead before long."

"Then that's the Callistan menace." My voice rose in sudden dismay, "But what of Charney and Steeden?"

"They're sunk," muttered the Captain grimly. "Unconscious —maybe dead. Those filthy worms are crawling towards them and there's nothing we can do about it." He ticked off the points on his fingers. "We can't go after them in a spacesuit without signing our own death warrant—spacesuits are steel.

No one can last there and back without one. We have no weapons with a beam fine enough to blast the Worms without scorching Charney and Steeden as well. I've thought of maneuvering the Ceres nearer and making a dash for it, but one can't handle a spaceship on planetary surfaces like that—not without cracking up. We—"

"In short," I interrupted hollowly, "we've got to stand here and watch them die." He nodded and I turned away bitterly.

I felt a slight twitch upon my sleeve, and when I turned, it was to find Stanley's wide blue eyes staring up at me. In the excitement, I had forgotten about him, and now I regarded him bad-temperedly.

"What is it?" I snapped.

"Mr. Jenkins," his eyes were red, and I think he would have preferred pirates to Magnet Worms by a good deal, "Mr. Jenkins, maybe I could go and get Mr. Carney and Mr. Steeden."

I sighed, and turned away.

"But, Mr. Jenkins, I could. I heard what Mr. Whitefield said, and my spacesuit isn't steel. It's vitri-rubber."

"The kid's right," whispered Whitefield slowly, when Stanley repeated his offer to the assembled men. "The unstrengthened field doesn't harm us, that's evident. He'd be safe in a vitri-rubber suit."

"But it's a wreck, that suit!" objected the Captain. "I never really intended having the kid use it." He ended raggedly and his manner was evidently irresolute.

"We can't leave Neal and Mac out there without trying, Captain," said Brock stolidly.

The Captain made up his mind suddenly and became a whirlwind of action. He dived into the space-suit rack for the battered relic himself, and helped Stanley into it.

"Get Steeden first," said the Captain, as he clipped shut the last bolt. "He's older and has less resistance to the field.

—Good luck to you, kid, and if you can't make it, come back right away. Right away, do you hear me?"

Stanley sprawled at the first step, but life on Ganymede had inured him to below-normal gravities and he recovered quickly. There was no sign of hesitation, as he leaped towards the two prone figures, and we breathed easier. Evidently, the magnetic field was not affecting him yet.

He had one of the suited figures over his shoulders now and was proceeding back to the ship at an only slightly slower pace. As he dropped his burden inside the airlock, he waved an arm to us at the window and we waved back.

He had scarcely left, when we had Steeden inside. We ripped the spacesuit off him and laid him out, a gaunt pale figure, on the couch.

The Captain bent an ear to his chest and suddenly laughed aloud in sudden relief, "The old geezer's still going strong."

We crowded about happily at hearing that, all eager to place a finger upon his wrist and so assure ourselves of the life within him. His face twitched, and when a low, blurred voice suddenly whispered, "So I said to Peewee, I said—" our last doubts were put to rest.

It was a sudden, sharp cry from Whitefield that drew us back to the window again, "Something's wrong with the kid."

Stanley was half way back to the ship with his second burden, but he was staggering now—progressing erratically.

"It can't be," whispered Whitefield, hoarsely, "it can't be.

The field can't be getting him!"

"God!" the Captain tore at his hair wildly, "that damned antique has no radio. He can't tell us what's wrong." He wrenched away suddenly. "I'm going after him. Field or no field, I'm going to get him."

"Hold on. Captain," said Tuley, grabbing him by the arm, "he may make it."

Stanley was running again, but in a curious weaving fashion that made it quite plain, he didn't see where he was going.

Two or three times he slipped and fell but each time he managed to scramble up again. He fell against the hull of the ship, at last, and felt wildly about for the yawning airlock. We shouted and prayed and sweated, but could help in no way.

And then he simply disappeared. He had come up against the lock and fallen inside.

We had them both inside in record time, and divested them of their suits. Charney was alive, we saw that at a glance, and after that we deserted him unceremoniously for Stanley. The blue of his face, his swollen tongue, the line of fresh "blood running from nose to chin told its own story.

'The suit sprung a leak," said Harrigan.

"Get away from him," ordered the Captain, "give him air."

We waited. Finally, a soft moan from the kid betokened returning consciousness and we all grinned in concert.

"Spunky little kid," said the Captain. "He travelled that last hundred yards on nerve and nothing else." Then, again.

"Spunky little kid. He's going to get a Naval Medal for this, if I have to give him my own."

Callisto was a shrinking blue ball on the televisor—an ordinary unmysterious world. Stanley Fields, honorary Captain of the good ship Ceres, thumbed his nose at it,