

*Not far in the  
future — it lay —*

# JUPITER TRAP

*A nasty planet — so big and unconcerned with the  
rest of the system —*

*A Novelette*  
by Ross Rocklynn

**D**EVEREL had had seven hours' start on Colbie; it had taken the officer of the law that long to float down to Vulcan's surface after the action of expanding gases within the tiny planet's interior had vomited him miles above it. In those few hours Deverel had had the opportunity to vanish into any direction; yet Colbie, using a canny process of elimination, tracked the outlaw to Ganymede.

Not, however, that it did him any good. Colbie was a good man to have in the interplanetary police force, a smart man; but he lacked the ability to let his imagination run rampant. Deverel was different; behind his smiling, cynical eyes was a mind that worked with the swiftness of lightning, a mind that never admitted defeat. Or perhaps it was simply that the forces of nature allied themselves with him, gave him hints of secrets that Colbie was denied—as in the Jupiter trap, for instance.

Colbie didn't *know* that Deverel was on Ganymede; he merely suspected it, and fervently hoped that it was so. He knew that all the minor planets—Mercury, Venus, Earth, Mars—were all on the other side of the Sun at that time, and to plot a successful course around the Sun takes a great deal of time and mental energy, the first of which the outlaw had none to spare, the second of which he would not have had the patience to make use of.

He also knew that Jupiter, and its family of worlds, lay in conjunction with Vulcan, that Deverel was running dangerously short in rocket fuel, that it was much less costly to travel in a straight line by first building up velocity and then coasting the rest of the way to Jupiter, where, at Jupiter City, he could refill his tanks.

So Colbie set his course for Jupiter. But, since he, too, was short on fuel, he also had to coast.

It took him ten days to cross that frightful gap between large and small planet, and when he did get in its vicinity, he was tired from the constant watch for meteors. He discovered that Ganymede, Jupiter's second-largest moon—diameter, thirty-two hundred miles—was less than ten thousand miles away; so he made up his mind to land there. Later, he decided Deverel would have experienced the same fatigue, and would have landed also.

Having come to this satisfying conclusion, he had to use further logic in determining at what point Deverel would have landed, but there was a comparatively simple solution to this problem. Years before there had been a fueling station on Ganymede, established to accommodate the great liners that had to make the long trips from the minor planets out to Pluto. But that was before man had learned how to combat the crushing atmospheric pressures and gravitations of such planets as Jupiter, Saturn, Uranus and Neptune, by the invention of the Jupiter suit. The fueling station—relocated now at Jupiter City—had been abandoned, for the raw materials of rocket fuel were to be found in inexhaustible quantities on Jupiter.

But the buildings were still standing, since the weather effects on Ganymede are practically nonexistent, and any Earthman would have been drawn to their vicinity as if by the action of a magnet.

The unmanned station was located on the floor of a small valley that received more Sunlight on the average than any other spot on Ganymede. When it had been built, that had been taken into consideration. Ganymede always presents one face to Jupiter, in its week-long orbit around the planet.

COLBIE went to the valley, skimming the rocky, tumbled surface of the planet so that Deverel would have little opportunity to glimpse him from afar. Literally, he stuck his nose over the lip of a precipice that fell sheer to the floor of the valley some hundreds of feet below. The valley was not wide, but it was fairly long. The Sun was the size of a dime, and the mountains threw short, dim, conflicting shadows.

What Colbie saw far exceeded his expectations. Exultantly, he spiraled the ship back up, then zoomed

down into the valley. Meteorlike, he cut as near to the edge of the precipice as he could. He turned the ship's nose down, and the ground came up, like a big white hand, to slap him. He jammed on the fore rockets, and grunted under the sudden deceleration produced. The ship came down lightly, settled to rest behind one of the large limestone boulders that lay in profusion across the floor of the valley.

He hurriedly locked his controls. He put on a space suit. Probably he could have stood the outside temperature, or even the thin air, but a space suit provided for both in a comfortably generous manner.

He swung open the port hatch, leaped out onto the ground, which was composed of a near-white, frozen, vegetationless clay. He stood looking about him. All was silent, motionless—as silent and motionless as only a lifeless planet can be.

Colbie stuck his head around the curve of the limestone boulder. About three hundred odd feet away lay a long, black cruiser. Less than a hundred feet from the cruiser was the shine of an icy lake, worn smooth by thin, timid breezes. On the opposite shore of the frozen lake were three buildings, all in various stages of disrepair, but, in the main, intact. The buildings were not high, but they were long. They had been used to store thousands and thousands of gallons of rocket fuel.

Colbie had been right when he supposed that those structures, so reminiscent of Earth and its peoples, would draw Deverel to their vicinity.

He remained hidden behind the aged, dirty-white boulder. He smiled to himself. Somberly, he swore to himself, that *this* time Deverel would go back with him.

He waited for Deverel to put in an appearance. His patience was his stanchest quality. He became a part of the landscape itself, though he imagined he was well enough hidden from the outlaw, since almost certainly he was leisurely inspecting the crumbling interiors of those lonely, deserted edifices across from the lake.

Colbie waited less than an hour. Then he stiffened, came to his feet. He saw Deverel, and, though four hundred feet of distance shortened the figure of the man, Colbie was sure it was he. He drew his projector, made sure it was charged, and waited.

## II.

DEVEREL came from the building, sauntered slowly toward the lake. He stopped on the shore of the lake, reached out a foot to test its strength, though that must have been a habit of Earthly experience, since for ages the lake must have been frozen solid to its bed. Then he was out on it, walking across slowly.

The outlaw set foot on the barren soil of the lake's shore, and Colbie jumped out from behind his hiding place, and, without parley, pulled the trigger of his weapon. Less than ten feet from where Deverel strode along, a geyser of powdered soil and rock spurted violently into the air.

Colbie shouted at the top of his voice. "Stay where you are, Deverel."

But, ever quick to respond to the stimulus of danger, Deverel did not stay where he was. Near him was a small limestone boulder. He threw himself behind it. Colbie fired again, just missing the outlaw.

There was a moment of tense silence. Then Deverel began to fire back, a steady blast of explosive projectiles that was not intended to annihilate Colbie, but merely to demolish the limestone mass behind which he was hidden.

Colbie had dived behind his shelter again, scared by the vicious fire. But he made ready to adopt Deverel's own tactics. And there he had Deverel at a definite disadvantage.

Calmly, he began to whittle the smaller limestone boulder down, beginning at the top, and progressing more slowly as he came to thicker portions. The thin air became a receptacle for volumes of sound. Powdered rock rained about Colbie. Sometimes larger particles fell on him; but he was not hurt, for gravitation here was slight.

He won sooner than he expected to. He had almost demolished Deverel's protection entirely, when a projectile caused it to split down the middle. The two halves fell away from each other, rolled a short distance, and then settled to rest. Deverel, flat on the ground, lay exposed. For a few seconds, he half-heartedly continued his fire, and Colbie, grinning, allowed him to do so.

Finally, Deverel stood up, shouting out loud, blending both chagrin and admission of defeat into his tones. He threw his weapon in the policeman's direction, and then held up his hands in token of surrender.

COLBIE ran across the space separating him from the other, grinning his triumph.

"Hello, Colbie," he said uncordially.

Colbie returned the greeting, and stood looking at the larger man with an exultation which, out of politeness, he tried to conceal.

"Don't look so smug," Deverel snapped, and added in exasperation. "How did you find me?"

Colbie told him. Deverel nodded, a grudging respect in his blue eyes. "That was good work, damned

good work. Going to take me back to Earth and jail, aren't you?"

"I was thinking seriously of that."

Deverel scowled. "All right. Let's get started. But I'll tell you this: I don't think I'll go back. I don't know why, either. But I place a lot of faith in miracles."

"It will be a miracle that lets you escape me this time," Colbie promised grimly.

Once within Colbie's ship, the outlaw was placed in irons. Colbie was taking no chances. He put Deverel in the control cabin, right where he could be seen.

Then he applied the power. The ship grated on the frozen soil of the planet, then swooped upward at a steep angle, swooped upward until the Moon drew its horizons together, until Jupiter, monstrous and dangerous, loomed into view, its multicolored face changing both form and variety of color.

Colbie happily piled on acceleration, followed a temporary trajectory to Earth until he could get busy and plot a precise one. But his satisfaction at the agreeable turn of events left little room for the maximum of caution he would have had otherwise.

Deverel sat motionless in his irons, resigned to his fate, within certain limits. He was watching Jupiter, and his thoughts were grim. He didn't want to go back to the hell holes on Mercury that they called jail. But at present, he couldn't see any way out. If only something would happen, one of those miracles he had so hopefully alluded to——

Almost as if his thoughts were conscious prelude to the event, before their minds could grasp the reality of it, the ship was turning head over heels in space. Jupiter was flashing dizzily first through one plate and another, with the whole heavens whizzing around after it as if they were deliberately chasing it. Colbie was thrown backward against the air-defining machinery. Abruptly, there was a sharp hiss as a tender glass tube broke under the impact. He bounced across to the opposite wall, then plunged toward the nose of the ship to collide, destructively, against the instrument panel.

Deverel was sitting tight in his irons, watching with wide eyes as the lights went out. On the instrument board a few bulbs were still burning, and the vision plates were still in operation. Deverel watched the jigsaw of motion. A massive encyclopedia, that had somehow found its way from the living quarters aft, came along. It hit Deverel on the side of the head. Other loose articles began to bombard him, but he was helpless to fend them off.

THERE WAS an eerie sense of downward motion, now; the outlaw supposed that it was downward in respect to Jupiter. He watched the mad hodgepodge with the wonder of a child. Colbie, desperately trying to secure a handhold, continued to jerk from one side of the ship to another. Almost battered out of his senses, he accidentally hooked his fingers around the starboard guide rail, and he hung on grimly, clearing his head.

He worked his way around to the instrument panel, and, with what few control levers he had not damaged in his mad flight about the ship, he tried to get the ship on an even keel. There was no response. He tried again. But it was useless. Swearing beneath his breath, he realized that one of those rare accidents had befallen him: although the ship had been traveling at a good clip, a meteor had caught up with it from behind and smashed itself into the stern jets, leaving them fused and useless.

He stood as still as he could, thinking seriously, and heard Deverel murmur with humor, "You were taking me back to Earth. Go on with the story from there."

"Don't be a fool," Colbie snapped coldly. "Do you think this is your miracle?"

"Maybe it is," Deverel said casually. "We're falling toward Jupiter."

"That doesn't mean anything! Not a thing—except that when we land we'll be lost, so lost that it'll be child's play finding that needle they used to talk about!"

Frantically, he worked at his controls again. Definitely, the jets were fused beyond repair. More than that, the lights wouldn't go on; nor were the air rectifiers working. Colbie found himself unable to right the ship by any means, and there is a sickening sensation in the feel of a ship that is not using an axis formed by stem and stern to twirl on.

Finally, Colbie got out the Jupiter suits.

"Men—three cheers for the Jupiter suits," sang Deverel, taking the line from a popular ballad. He hummed through the bars of the tune and then ended, "They say you can't die in a Jupiter suit. That's almost the truth," he added, and quoted again, "You can't get cold and you can't get hot, and the alloy won't crack, no matter what!"

"It's lucky I have them," Colbie remarked. "Just before I left Earth, the force finally got permission to equip its ships with a couple of the suits each. They're pretty costly; people are allowed to use them only on the big planets, where they have powerful gravities and thousands of pounds atmospheric pressure. They say the alloy they make them out of resembles neutronium, which is about the heaviest substance known, and the hardest. That's why they're so costly, and why they're distributed around so sparingly."

He took Deverel from the irons, pointed to a Jupiter suit. They clambered into the bulky affairs.

The ship was still spinning in that sickening way. Colbie felt sick. Deverel was smiling weakly. "Let's get out," he suggested, as they buckled down their helmets.

Colbie's head was reeling. He was trying to think clearly. He went to an aft compartment, got a pair of handcuffs. He came up behind Deverel, snapped one cuff around his wrist, and the other about his own.

Colbie opened the hatch. There was a gust of air that rushed out into vacuous space and dissipated itself in an expansion that might eventually have touched infinity. Colbie pushed the outlaw after the air, and perforce followed immediately after.

The ship was long and black beside them. To other sides was the starry sky, a sky which, from the interior of a hermetically sealed ship is bewilderingly grand and awesome, even to the initiated, but from without is domineering and frightening. There is no bottom to space. It is an awful sensation to fall——

THEY WERE falling, and the ship was falling with them. It was still spinning, though, and dangerously. The two men placed their space boots against the ship, succeeded in shoving themselves from its immediate vicinity. Twenty or thirty feet away, however, it continued to fall with them, true to the axiom that all bodies, no matter what their shapes, sizes, or weights, will fall at equal velocities, providing there is no atmosphere to affect them otherwise.

They felt no sense of weight; their very motion, being the effect of Jupiter's gravitation, was its cancellation. There was nothing but the tiniest sense of acceleration.

Below was the great, poisonously colored disk of Jupiter. In fascination, they watched its gradual growth.

Deverel broke the silence by murmuring, "Jupiter, hard, mean planet—I wonder how he'll treat us. We're liable to land anywhere, Colbie, anywhere on its billions of square miles. Jupiter City might be conceivably less than a hundred miles away, or more conceivably, a hundred thousand. In either case, we wouldn't have the food, air, or luck to get more than fifty miles. That planet is pock-marked with all sorts of mountain ranges, valleys, gorges, and every kind of un-Earthly river and sea. There are big lakes of acids, liquid ammonia, liquid oxygen, and Lord knows what other stuff. It isn't a pretty prospect."

### III.

LATER, many, many hours later, Deverel suddenly gestured. "There's the great red spot, Colbie—just on the rim. That's good, mighty good. It means we may fall somewhere near Jupiter City, if we watch our weights."

Colbie saw his line of reasoning. The spot, shooting up over the western rim of the planet, would, since Jupiter rotated on its axis in ten hours, disappear over the eastern rim in about five hours. Three hours later, Jupiter City, located on the equator, where gravitation and atmospheric pressure were considerably less than elsewhere, would then be working up over the western rim. Two and a half hours would bring it beneath their present position in space. That gave them ten and a half hours to land.

They could do it, if they regulated their weights. Jupiter suits were necessarily equipped with gravity controls. Of course, out here in space, any variation in their weights meant nothing so far as their downward velocity was concerned, but the moment they struck the atmosphere, it *would* mean something. By decreasing their weight they would decrease inertia, and thus increase the ability of the atmosphere to resist their passage through it. They would fall more slowly, and, if they were careful, they *might* land somewhere near Jupiter City.

The spot, still an enigma in the minds of all men, sloped down the curve of the planet, and disappeared, leaving the breath of a red glow after it. The glow disappeared.

Acceleration had been increasing rapidly. They were so near the planet that it almost blotted out a whole quarter of the sky.

Thirty-eight hours after deserting the ship they felt a new force being evoked about them, and the stars above had suddenly gone almost imperceptibly dimmer; it meant that they had entered the vast atmospheric envelope of the planet.

The stars were taking on distorted appearances; here, where the atmosphere was thin, they even twinkled a little, strongly reminiscent of a little green world which Colbie was beginning to feel he would never see again. Deverel seemed above such sentiments, or at least did not reveal their existence.

He seemed fascinated more than anything else. "I've been on Jupiter only once," he confided. "It was before I began pirating canal boats on Mars. Jupiter's a nasty planet, all right, but it's always interested me. Maybe because it's like me. It's so big, and so unconcerned with the rest of the system. It rolls along out here, takes its leisure going round the Sun—twelve years—and drags nine planets along with it, whether they want to go or not. It's a big chemical workshop. All sorts of marvelous things take place on its surface. It has such a high atmospheric pressure and gravitation that it seems it could do anything it wanted to in any element. When you think about it, it makes you glad you've got on a Jupiter suit."

They could talk without use of radio, now. The atmosphere was thick about them and carried the

sounds. The stars were going out and it was becoming utterly dark. There is no Sunlight on Jupiter's surface, for the gas blanket completely absorbs or else reflects what little light the Sun can send that far.

They began to decrease their gravity potential. They still had a little over three hours to fall, and at their present rate of speed they would strike the surface of the planet much too soon to leave them within walking distance of Jupiter City.

They watched their chronometers closely, and, because of that fact, time seemed to plod.

They estimated their height above the planet as being only a few miles now, and they experienced sensations of crawling fear. They were falling into darkness, onto the surface of a planet five and a half billion square miles in area. They had estimated the time of their falling as well as they could, however, and, if they had overlooked nothing, Jupiter City *should* be somewhere near, within a five-hundred-mile radius; though, of course, five hundred miles was as bad as a million, so far as traversing it was concerned.

THEY LIVED in a world of small, enigmatic noises now. All sorts of noises were rushing up at them from below, above the whirl occasioned by friction of their suits with the atmosphere. What were they? Animal life? Avalanches? Or rushing steams? Probably the latter, thought Colbie, or perhaps there was an ocean of some hellish liquid chemical down there, waiting to engulf them. He shuddered.

There were moments of tense waiting. Their nerves were keyed up for the first contact with the surface. It was exhausting. They didn't converse. They only stared down through blackness, vainly trying to find out how far they had to fall. Colbie could have introduced some light into their situation, had he gathered enough presence of mind to remember the search beam built into the breast of his Jupiter suit; but he didn't remember it, nor did Deverel; otherwise they would have saved themselves a good deal of the horror of uncertainty.

Colbie felt a constriction of fright. Something had brushed against his boots.

They touched again. Something had reached out from the darkness with light fingers, or so it seemed. Deverel let out his breath in a loud sigh. They tried to remain in a vertical position so that they might retain a sense of equilibrium should they strike some horizontal surface. But they couldn't. Slowly, they fell sidewise, frantically reaching out with hands that touched nothing.

Again they brushed a surface, and this time began to roll in crazy, slow motion down a steep slope. Abruptly, they came to rest on a hard surface. They lay there, motionless, after that ordeal in which nerves had suffered considerably more than anything else. And they became aware of a constant, forceful bombardment of little missiles that struck them from above.

#### IV.

SIMULTANEOUSLY, they jumped to their feet in that pitch blackness.

"What was that?" chattered Colbie, as the bombardment continued. Deverel was silent and then laughed. He reminded Colbie of the search beams built into their suits, and snapped his on. Colbie sheepishly slid aside his breast panel and did likewise. Twin shafts of light leaped out, partially piercing masses of swirling white gases.

The little missiles turned out to be nothing more than swiftly falling drops of a white liquid.

"Rain?" exclaimed Colbie, in brief astonishment.

"Must be liquid ammonia," corrected Deverel. "Jupiter doesn't bother with April showers, you know. No, it's so cold there couldn't be any liquid water. It's all ice, and there's probably little of that. They have to make their own water at Jupiter City. But this must be liquid ammonia; this 'rain' is colorless, looks like water, in fact."

Colbie flashed his beam about. He got a blurred impression of swirling white gases, of constantly falling rain. Close inspection showed that the stuff they trod on was worn almost frictionlessly smooth by the eternal fall of liquid ammonia. It had a gradual slope to it, and they followed this slope up until they came to a satin-smooth wall.

Colbie played the beam about, and found it to be a thick spire of basalt that rose up for a short distance, then leveled off. It was this they had first struck. They walked around the column, found it almost perfectly symmetrical. At its foot the rock sloped down at a uniform angle. They started walking down the slope. They came to what looked like a pool of water. Colbie assumed that it was liquid ammonia. He flashed his beam across this obstruction and brought into stark view a vertical black wall, down which streams of liquid ammonia were running in hasty rivulets. It was about forty feet across the ruffled surface of liquid ammonia to the wall.

Colbie discovered that the wall rose upward indefinitely, for his beam revealed no single break in it. Nor was there a single break in the escarpment to either side. It rose vertically, unflawed by the merest suggestion of a handhold.

THEY FOLLOWED the curve of the land, constantly examining the escarpment. After walking for fifteen minutes, they discovered this fact: that, although the escarpment receded at times, drew nearer at times, there was no slightest deviation from its absolutely vertical aspect.

Colbie stopped suddenly, thinking. Then he started walking back up the slope of the land, Deverel perforce following. A minute's walk brought them to the spire they had first examined, and Colbie gave vent to an exasperated curse.

He smiled sourly at Deverel. "Do you see it?"

"See what?"

"That we're on an island! An island in a lake of liquid ammonia; and the lake bounded by the most damnably vertical walls I ever saw." He grunted disgustedly. They fell silent. The rain fell constantly, forcefully, while they stood there, baffled and angry. But one could hardly remain angry at circumstances which anger could not affect.

Deverel was still secured to Colbie by handcuffs. Now he simply twisted his hand slightly; there was a brittle, cracking sound. Colbie whirled like a tiger, his projector out, a snarl contorting his features.

"No alarm, lieutenant." Deverel smiled. "Why should we tie each other down, since we're in such a bad fix. The cuffs would have snapped anyway. That alloy snaps easily in cold like this—not like the Jupiter suits."

Colbie remained poised in angry uncertainty for a few seconds, and then relaxed, viciously shoving his projector back into its holster.

"What do we do now?" asked the outlaw.

Colbie smiled cynically. "We stand here a while. Then we sit down. Then we get up again. Then, like everybody else slated for death, we'll manage to scrape up some false hope, and we'll take another look around. Then we'll sit down again."

"Interesting," Deverel commented quietly. "I suppose that goes on *ad infinitum*. I don't like the routine, myself. Well, let's sit down anyway."

They sat down.

There was a long silence.

There were gently fitful winds of ammonia gas. Sometimes they could hear the lapping of ammonia against the escarpment. The ammonia rain continued; its fall produced a constant, distantly drumming sound in their ears. But, all in all, these sounds just emphasized the eternal changelessness of the place.

Colbie had the feeling that if he sat there much longer he'd become just as unchanging. His nerves were at the snapping point. Snarling to himself at his impotence, he sprang to his feet, ran to the lake's edge. He followed the shore, flashing his beam in all directions. Deverel watched him disappear into the mists.

HE SAT MOTIONLESS, a phantom smile on his face. Whenever he thought deeply, he always wore that phantom smile. He was arriving at various conclusions which might or might not mean something.

When Colbie came back, he said, "Sit down, lieutenant. Your search has been fruitless."

Colbie sat down.

Deverel lay back on the smooth stuff of the island, sighing. "You know, Colbie, it's entirely possible that we're near the settlement."

"I suppose so," answered Colbie indifferently.

"It's nice to think of the place, isn't it? Especially since it seems as if we'll never see it.

"It's fitted up pretty comfortably. There's Earth food, running water, heated rooms, shows, dancing places, and newspapers—old newspapers. It certainly seems a dream to have that domed city so near and yet so far.

"It's mighty unfriendly outside the dome. Gas everywhere. You can hardly dignify it by the name atmosphere. Red, green, yellow—poisonous stuff—cyanide, ammonia, sulphur. Near the city are mountains, which rise to heights of four and five miles, like knives, and then drop down almost vertical on the other side. Man doesn't know much about them. But he's got the territory around Jupiter City pretty well mapped out, for a radius of thirty or forty miles.

There are lots of interesting things in that area—geysers and lakes and things like that; all full of a variety of chemicals in a liquid state. There's the Fountain—men call it that—it's a falls of liquid ammonia that spouts right out of the face of a cliff. They can't imagine its source. According to all logic—they measure the force of the falling liquid and can tell the height it falls from—it should originate about five miles up.

"Some explorers went up that high once, and with special instruments they followed the Fountain in its course through the mountain. Five miles up—which is about the highest a mountain ever gets on Jupiter, due to the gravity—they lost track of it. And they didn't find the source. They found that, due to conditions of atmospheric pressure and heat up there, ammonia gas would not condense to liquid. So how

could there possibly be a source for the Fountain up that high? Well, it's still a mystery. And there are those funny hills to the south of Jupiter City, Colbie, that are made of the hardest——"

He paused. "Not boring you?"

"Go ahead and talk," invited Colbie. "But it's queer to hear you sentimentalizing about the comforts of home."

But Deverel lay still, saying nothing more. Apparently he had said all he wanted to.

After a while, Colbie stretched out beside him. He felt apathetic. He was not bothered so much about their fate, now that he was quite certain what it was to be. For a while they would live and then they would die. There seemed no other course to follow. Dimly, in his moment of sleepiness, he remembered that time within Vulcan when he had allowed this outlaw beside him all the latitude he wished, because he had been so sure their cause was hopeless. And Deverel had escaped him. But, of course, *this* was different. There really was no way out this time. So he slept—for he was tired. And when he awoke, Deverel was gone.

## V.

HE SEARCHED the island, throwing light into every spot of darkness wherein the outlaw might have secreted himself. He managed to scale the spire that rose unflawed almost in the center of the island; but it was a gesture that indicated his absolute bewilderment.

His bewilderment gave place to a blazing anger directed against himself. Once more Deverel had utilized his remarkable energies of the mind and had escaped the law; once more Colbie had played the fool.

But cursing his own stupidity was no way to solve the questions paramount in his mind.

Where had Deverel gone? What flight of logic had told him there was a place to go to?

Colbie sat down and tried to think it out.

There were these facts to go on: He was on an island about seventy feet in diameter, just about in the center of a lake at least two hundred feet in diameter. The lake was girded by unscalable walls.

It rained continuously; ammonia rain, it was, that fell without stopping, that came down in torrents, and with considerable force—an eternal downpour. Did that mean anything? Was there any clue there? Thus his thoughts ran, and suddenly something clicked. Did it mean anything? Certainly it did! Why didn't the lake rise? Why didn't it come up and overrun the island? There wasn't any visible outlet; therefore there must be an invisible one!

He stiffened in exultation. That was how Deverel had gained egress from this trap! But, he thought more soberly, if that outlet were subterranean, as it must be, then it would almost positively lead to a point miles below the surface of Jupiter! Why, that was worse than the present predicament!

Deverel must have been crazy, he thought. No, he thought again, Deverel was *not* crazy; he was cunning, and he was the kind of a man who would take a chance when the odds were against him. What then, was the chance which Colbie was overlooking?

He couldn't solve the problem.

He began to think about that singularly queer soliloquy the outlaw had indulged in, and the more he thought about it the more he was convinced that the outlaw had said it with a purpose—perhaps to give Colbie a hint as to where he had gone.

He had laid particular emphasis upon a Jovian phenomenon called, by man, the Fountain. Was it possible that this lake was the Fountain's source? Irritably, he decided it couldn't be. Men of science had proved that the Fountain originated five miles up in the mountains, and that the condensation of liquid ammonia would not take place that high.

So Colbie had to reject the Fountain—almost. He stubbornly believed that Deverel had alluded to the Fountain with a possible solution in mind.

So Colbie arose from his reclining position, walked down to the lake's edge, where he stood looking at the water-clear liquid. He hesitated for but a moment, then walked into the lake.

ITS BED sloped down swiftly; Colbie reasoned it must be pretty deep. He walked forward with a steady, unflinching pace. It came up to his knees, to his hips, to his shoulders. It was then he hesitated again, shivering in chill apprehension. It was the idea of going down into the depths of the unknown that made him almost sick with fear. But he kept on walking, and when the constant bombardment of rain ceased, he knew that his head was beneath the surface.

He took another step forward. His foot touched nothing. He strove to regain his balance, but he fell downward slowly. He could not stay himself. But his fears were unfounded, for he landed on a solid surface, and struggled to his feet. Frantically, he switched on the search beam built into the breast of his suit, though he had wished to conserve his power for later emergencies. The swiftly dimming path of light did little, however, to relieve that abysmal fear of the unknown.

He came to the wall of the lake, noted that it continued in unabated austerity of contour down to the lake's floor. He followed it, one hand scraping it to help him keep his balance.

The lake was quiet, but there was a slight current. Knowledge of where this current must lead made his nerves crawl, but at least there was the comforting assurance that where he went, there was Deverel. Much good it was going to do him.

The current was becoming stronger. He felt as if the flat of a giant hand were urgently pushing him along. He tried to hold back, then, in panic, realized that he couldn't.

So he abandoned himself to the push of the current. He cooled down abruptly. There was no use fighting the unpreventable.

Then he was swept off balance. He began to spin. The liquid about him began to boil violently. He was swept to the right, breath-takingly, and it seemed as if he could hear the liquid humming past him, so swift became his passage. With what little latitude of thought his dizzy brain gave him, he reasoned that he was now in the outlet, a tunnel through the escarpment, probably.

For a few seconds his course was straight. He did not have the optimism to believe it would continue in that manner. Of course, it was bound to make a downward turn. He knew that well enough, and waited for it, waited for that sickening drop down into the bowels of the planet.

But, seemingly, the rigid laws of logic and physics were not adhered to on the crazy planet Jupiter, for the current did not turn down. It turned *up*.

Dumfounded, Colbie found himself too dazed to hunt for the solution. He didn't think there was a solution. Why, that stream simply *couldn't* turn up!

But it had.

AFTER A WHILE he found himself unable to think clearly anyway. In the long hour of that vertiginous ascent, he was battered repeatedly against the walls of the passage, and though the Jupiter suit, true to its legendary invulnerability, was not affected, Colbie felt the shocks in every bone and muscle in his body.

Turning over and over, on a cockeyed merry-go-round, he found himself unable to correlate his thought processes with the things that were happening to him. He had not the least idea where he was going, but he wished with all his heart that he would get there.

Abruptly, he was no longer ascending. He was coasting along on a straight course. Somewhere below lay the lake—miles below, it must be. Incredible little lake it was, sending its surplus content into an outlet which went upward, defying the very law of gravitation!

He had risen at a thirty-degree angle, and now he began to drop at even a greater angle, and thus a little faster. Then a great light dawned in him, and he thought he had grasped the truth. But it slipped away from him, even as consciousness slipped away.

He had been losing consciousness gradually. The merciless batterings against the sides of passage were beginning to tell. The last thing he remembered was placing his gravity control at about Earth normal. He was falling, falling fast, and he didn't want to hit too hard. Then the darkness of the tunnel seeped into his mind. He was quite unaware of the remainder of the descent and——

## VI.

ABRUPTLY, he was conscious of two things: first, a steady, throbbing, rushing, roaring sound that stole into his body and seemed to dominate its pulse beat; second, a strong light that was directed squarely onto his face. He tried to look beyond the beam, but couldn't. Anyway, he knew who it was.

"Feeling better?" Deverel asked, and, when Colbie made an attempt to get to his feet, added, "Stay where you are for awhile."

He had a projector in his hand—the deadly hand weapon of the twenty-third century. He had spoken slowly. Gloom was all around them. The beam itself had to pierce swirling, chaotically colored vapors.

"I knew you'd come along," said the outlaw.

"Did you?"

"Yes. I knew you'd figure it out far enough to enable you to follow me. Of course, I was only acting on guesswork myself. I was not sure I'd turn up safe."

"We're safe?"

"As can be. That's the Fountain you hear—all that rushing and roaring. Falls about a hundred feet from the face of the cliff behind you into a deep lake. I fished you out of the lake. You were floating. You had sense enough to decrease your gravity potential, probably for the same reason I did.

"Now you wonder why I went away without taking you. As I said before, I knew you'd follow. I dropped those hints about the Fountain for that purpose. If I had taken you with me, Colbie, I knew the confusion of it all would give you the chance to get the upper hand again. As it is, you see, I've got the upper hand. I took your projector," he added with humor.



Colbie groaned dismally to himself. Until now he hadn't realized it was gone. "Now what?" he inquired bitterly.

"I want your credentials."

"What?"

"They'll give me immunity in Jupiter City, Colbie. I can get a ship from the garrison. I can escape some place—never mind where, busybody. Give me your credentials."

"If you can get them," snarled Colbie, thrusting out his jaw angrily.

"If you don't give them to me, I'll kill you and take them."

Colbie opened one of the pocket drawers of the Jupiter suit and drew out a long metal tube. He gave it to Deverel, then eyed him questioningly.

"I'm going to Jupiter City," answered the outlaw. "You can follow me—after a while. I sort of like you, lieutenant, and I couldn't shoot you down in cold blood. By the way, I suppose you've solved the enigma of the Fountain?"

Colbie nodded his head in affirmation.

Deverel said, "Not so mysterious now, is it? Simple, in fact. I thought of the possibility when I went beneath the lake; but I was only acting on guesswork.

"It's possible, Colbie, that you had forgotten the enormous atmospheric pressure on Jupiter, a pressure which would have thwarted man's settlement of the planet had it not been for the discovery of the alloy from which Jupiter suits are made. That pressure is in the order of thousands and thousands of pounds to the square inch; it could raise a liquid to the height of five miles. If you had thought of that pressure, possibly you would also have considered the possibility of a siphon.

"You know the prime requisite of a siphon—that the liquid to be drained away must lie above the point to which it is drained. Well, the source of the Fountain, the lake where we thought we were hopelessly trapped, lies above the mouth of its outlet, the Fountain."

DEVEREL was talking slowly, in a monotone, perhaps merely to hear his own voice in this solitude of murmuring gases that whirled ceaselessly around.

"Take the ordinary siphoning tube—liquid is rising in the short arm, descending in the long. It is atmospheric pressure and gravitation that makes it possible. Take the ascending part of the hose—the liquid in it weighs less than the liquid in the descending part. All right, the liquid in the descending part falls—gravitation. It has a tendency to produce a vacuum in the hose—right where the siphon turns down at the top. Nature, as you have doubtless heard, abhors a vacuum. Air always tries to fill this vacuum; but in this case it can't get in. Naturally, the air transmits its pressure—atmospheric pressure—to the liquid, and the liquid goes up, preventing such a catastrophic occurrence as a vacuum.

"In this case, the liquid was ammonia; the siphoning tube was a tunnel through the mountains; and the outlet was the so-called Fountain. There you have all the requisites for a siphon—perfect."

Colbie had listened patiently; he knew well enough the principle of the siphon. He grinned wryly to himself. He had known the principle of the siphon so well that he remembered only that water, under atmospheric pressure, will rise thirty-three feet; but that had been on Earth, and never for a moment had he considered that Jupiter's immense atmospheric pressure was capable of raising a liquid of the order of density of water to a height a thousand times and more as great. Deverel, of course, had considered it!

But Colbie was able to pick the obvious flaw, or apparent flaw. "But," he pointed out, "the tunnel had to be filled before siphoning operations could start; otherwise there would be no tendency to a vacuum."

Deverel was thoughtfully silent for a moment. "That's a good point, but I don't think man will ever know the answer. All he can do is theorize. Theorizing, I'd say that once upon a time, a long time ago, the lake was far up in mountain region, and the tunnel was just a plain everyday subterranean outlet, ending at the Fountain.

"Then the whole mountain range buckled under the stress of weight distribution; the lake dropped; the tunnel was bent into the form of a siphoning tube. It wasn't choked up, so the liquid—it might have been, up that high, some other liquid gas than ammonia—kept on flowing." He nodded in satisfaction. "That's probably the answer, at that."

HE WAS SILENT. Murky gases danced fantastically through the beam of light.

Colbie lay on the strangely spongy soil, held there by the threat of the outlaw's weapon. He said, "We're using up oxygen."

Deverel snapped, "How long can you breathe on what you've got?"

"Thirty-six hours," answered Colbie, after inspecting the gauge.

Deverel growled to himself, "It's foolish things like this that are going to put me behind bars! Well, you can get to Jupiter City in about twelve hours. But I want you to stay here the other twenty-four."

Colbie's eyes widened in surprise. He started to say something and stopped. "I see," he said, looking at

the leveled weapon. He met Deverel's eyes and said solemnly, "You have my word of honor that I won't move any nearer Jupiter City than I am at present for twenty-four hours."

Deverel dropped the beam from Colbie's face and turned it on his own. He smiled in a friendly fashion. "All right, lieutenant," he said softly. "You're a good fellow—I hope the feeling is mutual. Well, good-by! I'll try to keep out of your way hereafter—for both our sakes I wish you would do the same!"

He turned quickly in the direction of Jupiter City. The search beam built into the breast of his Jupiter suit turned with him, and almost immediately, save for the faint glow of reflection from the thick gases that raced across the surface of the planet, he was lost to sight.

Colbie lay back on the ground, because his body was still an inferno of aches and pains. Bitterly, he began his twenty-four-hour wait; bitterly, because he resented his helplessness. Deverel wouldn't have much trouble getting a ship, and then there'd be the whole solar system that Colbie would have to go over as with a comb.

He reflected that Deverel's escape was not his fault so much as he had believed. Natural phenomena had a way of helping Deverel and forgetting him entirely.