

# **IN SATURN'S REALM**

George Griffith



# Table of Contents

<u>IN SATURN'S REALM</u> .....	1
<u>George Griffith</u> .....	2
<u>INTRODUCTION</u> .....	3

# IN SATURN'S REALM

IN SATURN'S REALM

**George Griffith**

## INTRODUCTION.

— For their honeymoon Rollo Lenox Smeaton Aubrey, Earl of Redgrave, and his bride, Lilla Zaidie, leave the earth on a visit to the Moon and the principal planets, their sole companion being Andrew Murgatroyd, an old engineer who had superintended the building of the Astronef, in which the journey is made. By means of the "R Force," or Anti-Gravitational Force, of the secret of which Lord Redgrave is the sole possessor, they are able to navigate with precision and safety the limitless ocean of Space. Their adventures on the Moon, Mars, Venus, and Jupiter have been described in the first four stories of the series.

THE relative position of the two giants of the Solar System at the moment when the Astronef left the surface of Ganymede, the third and largest satellite of Jupiter, was such that she had to make a journey of rather more than 340,000,000 miles before she passed within the confines of the Saturnian System.

At first her speed, as shown by the observations which Redgrave took by means of instruments designed for such a voyage by Professor Rennick, was comparatively slow. This was due to the tremendous "pull" or attraction of Jupiter and its four moons on the fabric of the Star Navigator; but this backward drag rapidly decreased as the pull of Saturn and his System began to overmaster that of Jupiter.

It so happened, too, that Uranus, the next outer planet of the Solar System, revolving round the Sun at the tremendous distance of more than 1,700,000,000 miles, was approaching its conjunction with Saturn, and thus the pull of the two huge orbs and their systems of satellites acted together on the tiny bulk of the Astronef, producing a constant acceleration of speed.

Jupiter and his System dropped behind, sinking, as it seemed to the wanderers, down into the bottomless gulf of Space, but still forming by far the most brilliant and splendid object in the skies. The far distant Sun which, seen from the Saturnian System, has only about a ninetieth of the superficial extent which he presents to the Earth, dwindled away rapidly until it began to look like a huge planet, with the Earth, Venus, Mars, and Mercury as satellites. Beyond the orbit of Saturn, Uranus, with his eight moons, was shining with the lustre of a star of the first magnitude, and far above and beyond him again hung the pale disc of Neptune, the outer guard of the Solar System, separated from the Sun by a gulf of more than 2,750,000,000 miles.

When two-thirds of the distance between Jupiter and Saturn had been traversed, Saturn lay beneath them like a vast globe surrounded by an enormous circular ocean of many-coloured fire, divided, as it were, by circular shores of shade and darkness. On the side opposite to them a gigantic conical shadow extended beyond the confines of the ocean of light. It was the shadow of half the globe of Saturn cast by the Sun across his rings. Three little dark spots were also travelling across the surface of the rings. They were the shadows of Mimas, Enceladus, and Tethys, the three inner satellites. Japetus, the most distant, which revolves at a distance ten times greater than that of the Moon from the Earth, was rising to their left above the edge of the rings, a pale, yellow, little disc shining feebly against the black background of Space. The rest of the eight satellites were hidden behind the enormous bulk of the planet, and the infinitely vaster area of the rings.

Day after day Zaidie and her husband had been exhausting the possibilities of the English language in attempting to describe to each other the multiplying marvels of the wondrous scene which they were approaching at a speed of more than a hundred miles a second, and at length Zaidie, after nearly an hour's absolute silence, during which they sat with eyes fastened to their telescopes, looked up and said:

"It's no use, Lenox, all the fine words that we've been trying to think of have just been wasted. The angels may have a language that you could describe that in, but we haven't. If it wouldn't be something like blasphemy I should drop down to the commonplace, and call Saturn a celestial spinning-top, with bands of light and shadow instead of colours all round it."

"Not at all a bad simile either," laughed Redgrave, as he got up from his chair with a yawn and a stretch of his athletic limbs, "still, it's as well that you said celestial, for, after all, that's about the best word we've found yet. Certainly the ringed world is the most nearly heavenly thing we've seen so far."

"But," he went on, "I think it's about time we were stopping this headlong fall of ours. Do you see how the landscape is spreading out round us? That means that we're dropping pretty fast. Whereabouts would you like to land? At present we're heading straight for the north pole."

"I think I'd rather see what the rings are like first," said Zaidie; "couldn't we go across them?"

## IN SATURN'S REALM

"Certainly we can," he replied, "only we'll have to be a bit careful."

"Careful, what of—collisions? I suppose you're thinking of Proctor's explanation that the rings are formed of multitudes of tiny satellites?"

"Yes, but I should go a little farther than that, I should say that his rings and his eight satellites are to Saturn what the planets generally and the ring of the Asteroides are to the Sun, and if that is the case—I mean if we find the rings made up of myriads of tiny bodies flying round with Saturn—it might get a bit risky.

"You see the outside ring is a bit over 160,000 miles across, and it revolves in less than eleven hours. In other words we might find the ring a sort of celestial maelstrom, and if we once got into the whirl, and Saturn exerted his full pull on us, we might become a satellite, too, and go on swinging round with the rest for a good bit of eternity."

"Very well, then," she said, "of course we don't want to do anything of that sort, but there's something else I think we could do," she went on, taking up a copy of Proctor's "Saturn and its System," which she had been reading just after breakfast. "You see those rings are, all together, about 10,000 miles broad; there's a gap of about 1700 miles between the big dark one and the middle bright one, and it's nearly 10,000 miles from the edge of the bright ring to the surface of Saturn. Now why shouldn't we get in between the inner ring and the planet? If Proctor was right and the rings are made of tiny satellites and there are myriads of them, of course they'll pull up while Saturn pulls down. In fact Flammarion says somewhere, that along Saturn's equator there is no weight at all."

"Quite possible," said Redgrave, "and, if you like, we'll go and prove it. Of course, if the Astronef weighs absolutely nothing between Saturn and the rings, we can easily get away. The only thing that I object to is getting into this 170,000 mile vortex, being whizzed round with Saturn every ten and a half hours, and sauntering round the Sun at 21,000 miles an hour."

"Don't," she said, "really it isn't good to think about these things, situated as we are. Fancy, in a single year of Saturn there are nearly 25,000 days. Why, we should each of us be about thirty years older when we got round, even if we lived, which, of course, we shouldn't. By the way, how long could we live for, if the worst came to the worst?"

"About two earth-years at the outside," he replied, "but, of course, we shall be home long before that."

"If we don't become one of the satellites of Saturn," she replied, "or get dragged away by something into the outer depths of Space."

Meanwhile the downward speed of the Astronef had been considerably checked. The vast circle of the rings seemed to suddenly expand, though it now covered the whole floor of the vault of Space.

As the Astronef dropped towards what might be called the limit of the northern tropic of Saturn, the spectacle presented by the rings became every minute more and more marvellous—purple and silver, black and gold, dotted with myriads of brilliant points of many-coloured lights, they stretched upwards like vast rainbows in the Saturnian sky as the Astronef's position changed with regard to the horizon of the planet. The nearer they approached the surface, the nearer the gigantic arch of the many coloured rings approached the zenith. Sun and stars sank down behind it, for now they were dropping through the fifteen-year-long twilight that reigns over that portion of the globe of Saturn which during half of his year of thirty terrestrial years is turned away from the Sun.

The further they dropped towards the rings the more certain it became that the theory of the great English astronomer was the correct one. Seen through the telescopes at a distance of only thirty or forty thousand miles, it became perfectly plain that the outer or darker ring as seen from the Earth, was composed of myriads of tiny bodies so far separated from each other that the rayless blackness of Space could be seen through them.

"It's quite evident," said Redgrave, "that those are rings of what we should call meteorites on earth, atoms of matter which Saturn threw off into Space after the satellites were formed."

"And I shouldn't wonder, if you will excuse my interrupting you," said Zaidie, "if the moons themselves have been made up of a lot of these things going together when they were only gas, or nebula or something of that sort. In fact, when Saturn was a good deal younger than he is now, he may have had a lot more rings and no moons, and now these aerolites, or whatever they are, can't come together and make moons, because they've got too solid."

Meanwhile the Astronef was dropping rapidly down towards the port on of Saturn's surface which was illuminated by the rays of the Sun, streaming under the lower arch of the inner ring.

As they passed under it the whole scene suddenly changed. The rings vanished. Overhead was an arch of

## IN SATURN'S REALM

brilliant light a hundred miles thick, spanning the whole of the visible heavens. Below lay the sunlit surface of Saturn divided into light and dark bands of enormous breadth.

The band immediately below them was of a brilliant silver-grey, very much like the central zone of Jupiter. North of this on the one side stretched the long shadow of the rings, and southward other bands of alternating white and gold and deep purple succeeded each other till they were lost in the curvature of the vast planet. The poles were of course invisible since the Astronef was now too near to the surface; but on their approach they had seen unmistakable evidence of snow and ice.

As soon as they were exactly under the Ring-arch, Redgrave shut off the R. Force, and, somewhat to their astonishment, the Astronef began to revolve slowly on its axis, giving them the idea that the Saturnian System was revolving round them. The arch seemed to sink beneath their feet while the belts of the planet rose above them.

"What on earth is the matter?" said Zaidie. "Everything has gone upside down."

"Which shows," replied Redgrave, "that as soon as the Astronef became neutral the rings pulled harder than the planet, I suppose because we're so near to them, and, instead of falling on to Saturn, we shall have to push up at him."

"Oh yes, I see that," said Zaidie, "but after all it does look a little bit bewildering, doesn't it, to be on your feet one minute and on your head the next?"

"It is, rather; but you ought to be getting accustomed to that sort of thing now. In a few minutes neither you, nor I, nor anything else will have any weight. We shall be just between the attraction of the Rings and Saturn, so you'd better go and sit down, for if you were to give a bit of an extra spring in walking you might be knocking that pretty head of yours against the roof," said Redgrave, as he went to turn the R. Force on to the edge of the Rings.

A vast sea of silver cloud seemed now to descend upon them. Then they entered it, and for nearly half-an-hour the Astronef was totally enveloped in a sea of pearl-grey luminous mist.

"Atmosphere!" said Redgrave, as he went to the conning-tower and signalled to Murgatroyd to start the propellers. They continued to rise and the mist began to drift past them in patches, showing that the propellers were driving them ahead.

They now rose swiftly towards the surface of the planet. The cloud wrack got thinner and thinner, and presently they found themselves floating in a clear atmosphere between two seas of cloud, the one above them being much less dense than the one below.

"I believe we shall see Saturn on the other side of that," said Zaidie, looking up at it. "Oh dear, there we are going round again."

"Reaching the point of neutral attraction," said Redgrave; "once more you'd better sit down in case of accidents."

Instead of dropping into her deck chair as she would have done on Earth, she took hold of the arms and pulled herself into it, saying:

"Really it seems rather absurd to have to do this sort of thing. Fancy having to hold yourself into a chair. I suppose I hardly weigh anything at all now"

"Not much," said Redgrave, stooping down and taking hold of the end of the chair with both hands. Without any apparent effort he raised her about five feet from the floor, and held her there while the Astronef made another revolution. For a moment he let go, and she and the chair floated between the roof and the floor of the deck-chamber. Then he pulled the chair away from under her, and as the floor of the vessel once more turned towards Saturn, he took hold of her hands and brought her to her feet on deck again.

"I ought to have had a photograph of you like that!" he laughed. "I wonder what they'd think of it at home?"

"If you had taken one I should certainly have broken the negative. The very idea, a photograph of me standing on nothing! Besides, they'd never believe it on Earth."

"We might have got old Andrew to make an affidavit to that effect," he began.

"Don't talk nonsense, Lenox! Look! There's something much more interesting. There's Saturn at last. Now I wonder if we shall find any sort of life there—and shall we be able to breathe the air?"

"I hardly think so," he said, as the Astronef dropped slowly through the thin cloud-veil. "You know spectrum analysis has proved that there is a gas in Saturn's atmosphere which we know nothing about, and, whatever it may be for the inhabitants' it's not very likely that it would agree with us, so I think we'd better be content with our



## IN SATURN'S REALM

own. Besides, the atmosphere is so enormously dense that even if we could breathe it it might squash us up. You see we're only accustomed to fifteen pounds on the square inch, and it may be hundreds of pounds here."

"Well," said Zaidie, "I haven't got any particular desire to be flattened out like that, or squeezed dry like an orange. It's not at all a nice idea, is it? But, look, Lenox," she went on, pointing downwards, "surely this isn't air at all, or at least it's something between air and water. Aren't these things swimming about in it—something like fish in the sea? They can't be clouds, and they aren't either fish or birds. They don't fly or float. Well, this is certainly more wonderful than anything else we've seen, though it doesn't look very pleasant. They're not nice looking, are they? I wonder if they are at all dangerous!"

While she was saying this Zaidie had gone to her telescope, and was sweeping the surface of Saturn, which was now about 100 miles distant. Her husband was doing the same. In fact, for the time being they were all eyes, for they were looking on a stranger sight than human beings had ever seen before.

Underneath the inner cloud-veil the atmosphere of Saturn appeared to them somewhat as the lower depths of the ocean would appear to a diver, granted that he was able to see for hundreds of miles about him. Its colour was a pale greenish yellow. The outside thermometers showed that the temperature was a hundred and seventy-five. In fact the interior of the Astronef was getting uncomfortably like a Turkish bath, and Redgrave took the opportunity of at once freshening and cooling the air by releasing a little from the cylinders where it was stored in liquid form.

From what they could see of the surface of Saturn it seemed to be a dead level, greyish-brown in colour, and not divided into oceans and continents. In fact there were no signs whatever of water within range of their telescopes. There was nothing that looked like cities, or any human habitations, but the ground, as they got nearer to it, seemed to be covered with a very dense vegetable growth, not unlike gigantic forms of seaweed, and of somewhat the same colour. In fact, as Zaidie remarked, the surface of Saturn was not at all unlike what the floors of the ocean of the Earth might be if they were laid bare.

It was evident that the life of this portion of Saturn was not what, for want of a more exact word, might be called terrestrial. Its inhabitants, however they were constituted, floated about in the depths of this semi-gaseous ocean as the denizens of earthly seas did in the terrestrial oceans. Already their telescopes enabled them to make out enormous moving shapes, black and grey-brown and pale red, swimming about, evidently by their own volition, rising and falling and often sinking down on to the gigantic vegetation which covered the surface, possibly for the purpose of feeding. But it was also evident that they resembled the inhabitants of earthly oceans in another respect since it was easy to see that they preyed upon each other.

"I don't like the look of those creatures at all," said Zaidie when the Astronef had come to a stop and was floating about five miles above the surface. "They're altogether too uncanny. They look to me something like jelly-fish about the size of whales only they have eyes and mouths. Did you ever see such awful looking eyes, bigger than soup-plates and as bright as a cat's. I suppose that's because of the dim light. And the nasty wormy sort of way they swim, or fly, or whatever it is. Lenox, I don't know what the rest of Saturn may be like, but I certainly don't like this part. It's quite too creepy and unearthly for my taste. Look at the horrors fighting and eating each other. That's the only bit of earthly character they've got about them; the big ones eating the little ones. I hope they won't take the Astronef for something nice to eat."

"They'd find her a pretty tough morsel if they did," laughed Redgrave, "but still we may as well get some speed on her in case of accident."

In obedience to a signal to Murgatroyd, the propellers began to revolve, beating the dense air and driving the Star Navigator about twenty miles an hour through the depths of this strangely-peopled ocean.

They approached nearer and nearer to the surface, and as they did so the strange creatures about them grew more and more numerous. They were certainly the most extraordinary living things that human eyes had looked upon. Zaidie's comparison to the whale and the jelly fish was by no means incorrect; only when they got near enough to them they found, to their astonishment, that they were double-headed—that is to say, they had a head furnished with mouth, nostrils, ear-holes, and eyes at each end of their bodies.

The larger of the creatures appeared to have a certain amount of respect for each other. Now and then they witnessed a battle-royal between two of the monsters who were pursuing the same prey. Their method of attack was as follows: the assailant would rise above his opponent or prey, and then, dropping on to its back, envelope it and begin tearing at its sides and under parts with huge beak-like jaws, somewhat resembling those of the largest

## IN SATURN'S REALM

kind of the earthly octopus, only very much larger. The substance composing their bodies appeared to be not unlike that of a terrestrial jelly-fish, but much denser, and having the tenacity of soft India rubber save at the double ends, where it was much harder, in fact a good deal more like horn.

When one of them had overpowered an enemy or a victim the two sank down into the vegetation, and the victor began to eat the vanquished. Their means of locomotion consisted of huge fins, or rather half fins, half wings, of which they had three laterally arranged behind each head, and four much longer and narrower, above and below, which seemed to be used mainly for steering purposes.

They moved with equal ease in either direction, and they appeared to rise or fall by inflating or deflating the middle portions of their bodies, somewhat as fish do with their swimming bladders.

The light in the lower regions of this strange ocean was dimmer than earthly twilight, although the Astronef was steadily making her way beneath the arch of the rings towards the sunlit hemisphere.

"I wonder what the effect of the searchlight would be on these fellows!" said Redgrave. "Those huge eyes of theirs are evidently only suited to dim light. Let's try and dazzle some of them."

"I hope it won't be a case of the moths and the candle!" said Zaidie. "They don't seem to have taken much interest in us so far. Perhaps they haven't been able to see properly, but suppose they were attracted by the light and began crowding round us and fastening on to us, as the horrible things do with each other. What should we do then? They might drag us down and perhaps keep us there; but there's one thing, they'd never eat us, because we could keep closed up and die respectably together."

"Not much fear of that, little woman," he said, "we're too strong for them. Hardened steel and toughened glass ought to be more than a match for a lot of exaggerated jelly-fish like these," said Redgrave, as he switched on the head search-light. "We've come here to see strange things and we may as well see them. Ah, would you my friend. No, this is not one of your sort, and it isn't meant to eat."

A huge, double-headed monster, apparently some four hundred feet long, came floating towards them as the search-light flashed out, and others began instantly to crowd about them, just as Zaidie had feared.

"Lenox, for Heaven's sake be careful!" cried Zaidie, shrinking up beside him as the huge, hideous head, with its saucer eyes and enormous beak-like jaws wide open, came towards them. "And look, there are more coming. Can't we go up and get away from them?"

"Wait a minute, little woman," replied Redgrave, who was beginning to feel the passion of adventure thrilling in his nerves "If we fought the Martian air fleet and licked it I think we can manage these things. Let's see how he likes the light."

As he spoke he flashed the full glare of the five thousand candle-power lamp full on to the creature's great cat-like eyes. Instantly it bent itself up into an arc. The two heads, each the exact image of the other, came together. The four eyes glared half dazzled into the conning-tower and the four huge jaws snapped viciously together.

"Lenox, Lenox, for goodness sake let us go up!" cried Zaidie shrinking still closer to him. "That thing's too horrible to look at."

"It is a beast, isn't it?" he said, "but I think we can cut him in two without much trouble."

He pressed one of the buttons on the signal board three times quickly and once slowly. It was the signal for full speed on the propellers, that is to say about a hundred earth-miles an hour. The Astronef ought to have sprung forward and driven her ram through the huge, brick-red body of the hideous creature which was now only a couple of hundred yards from them; but instead of that a slow, jarring, grinding thrill seemed to run through her, and she stopped. The next moment Murgatroyd put his head up through the companion-way which led from the upper deck to the conning-tower, and said in a tone whose calm indicated, as usual, resignation to the worst that could happen:

"My lord, two of those beasts, fishes or live balloons, or whatever they are, have come across the propellers. They're cut up a good bit, but I've had to stop the engines, and they're clinging all round the after part. We're going down, too. Shall I disconnect the propellers and turn on the repulsion?"

"Yes, certainly, Andrew!" cried Zaidie, "and all of it, too. Look, Lenox, that horrible thing is coming. Suppose it broke the glass, and we couldn't breathe this atmosphere!"

As she spoke the enormous, double-headed body advanced until it completely enveloped the forward part of the Astronef. The two hideous heads came close to the sides of the conning-tower; the huge, palely luminous

## IN SATURN'S REALM

eyes looked in upon them. Zaidie, in her terror, even thought that she saw something like human curiosity in them.

Then, as Murgatroyd disappeared to obey the orders which Redgrave had sanctioned with a quick nod, the heads approached still closer, and she heard the ends of the pointed jaws, which she now saw were armed with shark-like teeth, striking against the thick glass walls of the conning-tower.

"Don't be frightened, dear!" he said, putting his arm round her, just as he had done when they thought they were falling into the fiery seas of Jupiter. "You'll see something happen to this gentleman soon. Big and all as he is there won't be much left of him in a few minutes. They are like those monsters they found in the lowest depths of our own seas. They can only live under tremendous pressure. That's why we didn't find any of them up above. This chap'll burst like a bubble presently. Meanwhile, there's no use in stopping here. Suppose you go below and brew some coffee and bring it up on deck with a drop of brandy in it, while I go and see how things are looking aft. It doesn't do you any good, you know, to be looking at monsters of this sort. You can see what's left of them later on."

Zaidie was not at all sorry to obey him, for the horrible sight had almost sickened her.

They were still under the arch of the rings, and so, when the full strength of the R. Force was directed against the body of Saturn, the vessel sprang upwards like a projectile fired from a cannon.

Redgrave went back into the conning-tower to see what happened to their assailant. It was already trying vainly to detach itself and sink back into a more congenial element. As the pressure of the atmosphere decreased its huge body swelled up into still huger proportions. The skin on the two heads puffed up as though air was being pumped in under it. The great eyes protruded out of their sockets; the jaws opened widely as though the creature were gasping for breath.

Meanwhile Murgatroyd was seeing something very similar at the after end, and wondering what was going to happen to his propellers, the blades of which were deeply imbedded in the jelly-like flesh of the monsters.

The Astronef leaped higher and higher, and the hideous bodies which were clinging to her swelled out huger and huger, and Redgrave even fancied that he heard something like the cries of pain from both heads on either side of the conning-tower. They passed through the inner cloud-veil, and then the Astronef began to turn on her axis, and, just as the outer envelope came into view the enormously distended bulk of the monsters collapsed, and their fragments, seeming now more like the tatters of a burst balloon, dropped from the body of the Astronef and floated away down into what had once been their native element.

"Difference of environment means a lot, after all," said Redgrave to himself. "I should have called that either a lie or a miracle if I hadn't seen it, and I'm jolly glad I sent Zaidie down below."

"Here's your coffee, Lenox," said Zaidie's voice from the upper deck, "only it doesn't seem to want to stop in the cups, and the cups keep getting off the saucers. I suppose we're turning upside down again."

Redgrave stepped somewhat gingerly on to the deck, for his body had so little weight under the double attraction of Saturn and the Rings that a very slight effort would have sent him flying up to the roof of the deck-chamber.

"That's exactly as you please," he said, "just hold that table steady a minute. We shall have our centre of gravity back soon. And now, as to the main question, suppose we take a trip across the sunlit hemisphere of Saturn to, what I suppose we should call, on Earth, the South Pole. We can get resistance from the Rings, and as we are here we may as well see what the rest of Saturn is like. You see, if our theory is correct as to the Rings gathering up most of the atmosphere of Saturn about its equator, we shall get to higher altitudes where the air is thinner and more like our own, and therefore it's quite possible that we shall find different forms of life in it too—or if you've had enough of Saturn and would prefer a trip to Uranus—?"

"No, thanks," said Zaidie quickly. "To tell you the truth, Lenox, I've had almost enough star-wandering for one honeymoon, and though we've seen nice things as well as horrible things—especially those ghastly, slimy creatures down there—I'm beginning to feel a bit homesick for good old mother Earth. You see, we're nearly a thousand million miles from home, and, even with you, it makes one feel a bit lonely. I vote we explore the rest of this hemisphere up to the pole, and then, as they say at sea—I mean our sea—'bout ship, and see if we can find our own old world again. After all, it's more homelike than any of these, isn't it?"

"Just take your telescope and look at it," said Redgrave, pointing towards the Sun, with its little cluster of attendant planets. "It looks something like one of Jupiter's little moons down there, doesn't it, only not quite as

## IN SATURN'S REALM

big?"

"Yes, it does, but that doesn't matter. The fact is that it's there, and we know what it's like, and it's home, if it is a thousand million miles away, and that's everything."

By this time they had passed through the outer band of clouds. The huge, sunlit arch of the Rings towered up to the zenith, and apparently overarched the whole heavens. Below and in front of them lay the enormous semi-circle of the hemisphere which was turned towards the Sun, shrouded by its many colored bands of clouds. The Repulsive Force was directed strongly against the lower Ring, and the Astronef dropped rapidly in a slanting direction through the cloud-bands towards the southern temperate zone of the planet.

They passed through the second, or dark, cloud-band at the rate of about three thousand miles an hour, aided by the Repulsion against the Rings and, the attraction of the planet, and soon after lunch, the materials of which now consented to remain on the table, they passed through the clouds and found themselves in a new world of wonders.

On a far vaster scale, it was the Earth during that period of its development which is called the Reptilian Age. The atmosphere was still dense and loaded with aqueous vapour, but the waters had already been divided from the land.

They passed over vast, marshy continents and islands, and warm seas, above which thin clouds of steam still hung. They passed through these, and, as they swept southward with the propellers working at their utmost speed, they caught glimpses of giant forms rising out of the steamy waters near the land; of others crawling slowly over it, dragging their huge bulk through a tremendous vegetation, which they crushed down as they passed, as a sheep on earth might push its way through a field of standing corn.

Yet other shapes, huge winged and ungainly, fluttered with a slow, bat-like motion, through the lower strata of the atmosphere.

Every now and then during the voyage across the temperate zone the propellers were slowed down to enable them to witness some Titanic conflict between the gigantic denizens of land and sea and air. But her ladyship had had enough of horrors on the Saturnian equator, and so she was quite content to watch this phase of evolution (as it had happened on the Earth many thousands of ages ago) from a convenient distance, and so the Astronef sped on southward without approaching the surface nearer than a couple of miles.

"It'll be all very nice to see and remember and dream about afterwards," she said, "but really I don't think I can stand any more monsters just now, at least not at close quarters, and I'm quite sure if those things can live there we couldn't, any more than we could have lived on Earth a million years or so ago. No, really I don't want to land, Lenox, let's go on."

They went on at a speed of about a hundred miles an hour, and, as they progressed southward, both the atmosphere and the landscape rapidly changed. The air grew clearer and the clouds lighter. Lands and seas were more sharply divided, and both teeming with life. The seas still swarmed with serpentine monsters of the saurian type, and the firmer lands were peopled by huge animals, mastodons, bears, giant tapirs, nyledons, deinotheriums, and a score of other species too strange for them to recognise by any earthly likeness, which roamed in great herds through the vast twilit forests and over boundless plains covered with grey-blue vegetation.

Here, too, they found mountains for the first time on Saturn; mountains steep-sided, and many earth-miles high.

As the Astronef was skirting the side of one of these ranges Redgrave allowed it to approach more closely than he had so far done to the surface of Saturn.

"I shouldn't wonder if we found some of the higher forms of life up here," he said. "If there is anything here that's going to develop some clay into the human race of Saturn, it would naturally get up here."

"Of course it would," said Zaidie, "as far as possible out of the reach of those unutterable horrors on the equator. I should think that would be one of the first signs they would show of superior intelligence. Look, I believe there are some of them. Do you see those holes in the mountain side there? And there they are, something like gorillas, only twice as big, and up the trees, too—and what trees! They must be seven or eight hundred feet high."

"Tree and cave-dwellers, and ancestors of the future royal race of Saturn, I suppose!" said Redgrave. "They don't look very nice, do they? Still, there's no doubt about their being far superior in intelligence to what we left behind us. Evidently this atmosphere is too thin for the two-headed jelly-fishes, and the saurians to breathe.

## IN SATURN'S REALM

These creatures have found that out in a few hundreds of generations, and so they have come to live up here out of the way. Vegetarians, I suppose, or perhaps they live on smaller monkeys and other animals, just as our ancestors did."

"Really, Lenox," said Zaidie, turning round and facing him, "I must say that you have a most unpleasant way of alluding to one's ancestors. They couldn't help what they were."

"Well, dear," he said, going towards her, "marvellous as the miracle seems, I'm heretic enough to believe it possible that your ancestors even, millions of years ago, perhaps, may have been something like those; but then, of course, you know I'm a hopeless Darwinian."

"And, therefore, entirely horrid, as I've often said before when you get on subjects like these. Not, of course, that I'm ashamed of my poor relations; and then, after all, your Darwin was quite wrong when he talked about the descent of man—and woman. We—especially the women—have ascended from that sort of thing, if there's any truth in the story at all; though, personally, I must say I prefer dear old Mother Eve."

"Who never had a sweeter daughter!" he replied, drawing her towards him.

"And, meanwhile, compliments being barred, I'll go and get dinner ready," she said. "After all, it doesn't matter what world one's in, one get's hungry all the same."

The dinner, which was eaten somewhere in the middle of the fifteen-year-long day of Saturn, was a very pleasant one, because they were now nearing the turning-point of their trip into the depths of Space, and thoughts of home and friends were already beginning to fly back across the thousand-million-mile gulf which lay between them and the Earth which they had left only a little more than two months ago.

While they were at dinner the Astronef rose above the mountains and resumed her southward course. Zaidie brought the coffee up on deck as usual after dinner, and, while Redgrave smoked his cigar and Zaidie her cigarette, they luxuriated in the magnificent spectacle of the sunlit side of Rings towering up, rainbow built on rainbow, to the zenith of their visible heavens.

"What a pity there aren't any words to describe it!" said Zaidie. "I wonder if the descendants of the ancestors of the future human race on Saturn will invent anything like a suitable language. I wonder how they'll talk about those Rings millions of years hence."

"By that time there may not be any Rings," Lenox replied, blowing a ring of smoke from his own lips. "Look at that—made in a moment and gone in a moment—and yet on exactly the same principle, it gives one a dim idea of the difference between time and eternity. After all it's only another example of Kelvin's theory of vortices. Nebulae, and asteroids, and planet-rings, and smoke-rings are really all made on the same principle."

"My dear Lenox, if you're going to get as philosophical and as commonplace as that I'm going to bed. Now that I come to think of it, I've been about fifteen earth-hours out of bed, so it's about time I went. It's your turn to make the coffee in the morning—our morning I mean—and you'll wake me in time to see the South Pole of Saturn, won't you? You're not coming yet, I suppose?"

"Not just yet, dear. I want to see a bit more of this, and then I must go through the engines and see that they're all right for that thousand million mile homeward voyage you're talking about. You can have a good ten hours' sleep without missing much, I think, for there doesn't seem to be anything more interesting than our own Arctic life down there. So good-night, little woman, and don't have too many nightmares."

"Good-night!" she said, "if you hear me shout you'll know that you've to come and protect me from monsters. Weren't those two-headed brutes just too horrid for words? Good-night, dear!"