## CHAPTER SEVEN

## A PLANET OF GOLD

The squadron had been rapidly withdrawn to a very considerable distance from the asteroid. The range of the mysterious artillery employed by the Martians was unknown to us. We did not even know the limit of the effective range of our own disintegrators. If it should prove that the Martians were able to deal their strokes at a distance greater than any we could reach, then they would of course have an insuperable advantage.

On the other hand, if it should turn out that our range was greater than theirs, the advantage would be on our side. Or--which was perhaps most probable--there might be practically no difference in the effective range of the engines.

Anyhow, we were going to find out how the case stood, and that without delay.

Everything being in readiness, the disintegrators all in working order, and the men who were able to handle them, most of whom were experienced marksmen, chosen from among the officers of the regular army of the United States, and accustomed to the straight shooting and the sure hits of the West, standing at their posts, the squadron again advanced.

In order to distract the attention of the Martians, the electrical ships had been distributed over a wide space. Some dropped straight down toward the asteroid; others approached it by flank attack, from this side and that. The flagship moved straight in toward the point where the first disaster occurred. Its intrepid commander felt that his post should be that of the greatest danger, and where the severest blows would be given and received.

The approach of the ships was made with great caution. Watching the Martians with our telescopes we could clearly see that they were disconcerted by the scattered order of our attack. Even if all of their engines of war had been in proper condition for use it would have been impossible for them to meet the simultaneous assault of so many enemies dropping down upon them from the sky.

But they were made of fighting mettle, as we knew from old experience. It was no question of surrender. They did not know how to surrender, and we did not know how to demand their surrender. Besides, the destruction of the two electrical ships with the forty men, many of whom bore names widely known upon the earth, had excited a kind of fury among the members of the squadron which called for vengeance.

Suddenly a repetition of the quick movement by the Martians, which had been the forerunner of the former coup, was observed; again a blinding flash burst from their war engines and instantaneously a shiver ran through the frame of the flagship; the air within quivered with strange pulsations and seemed suddenly to have assumed the temperature of a blast furnace.

We all gasped for breath. Our throats and lungs seemed scorched in the act of breathing. Some fell unconscious upon the floor. The marksmen, carrying the disintegrators ready for use, staggered, and one of them dropped his instrument.

But we had not been destroyed like our comrades before us. In a moment the wave of heat passed; those who had fallen recovered from their momentary stupor and staggered to their feet.

The electrical steersman stood hesitating at his post.

"Move on," said Mr. Edison sternly, his features set with determination and his eyes afire.

"We are still beyond their effective range. Let us get closer in order to make sure work when we strike."

The ship moved on. One could hear the heartbeats of its inmates. The other members of the squadron, thinking for the moment that disaster had overtaken the flagship, had paused and seemed to be meditating flight.

"Signal them to move on," said Mr. Edison.

The signal was given, and the circle of electrical ships closed in upon the asteroid.

In the meantime Mr. Edison had been donning his air-tight suit. Before we could clearly comprehend his intention he had passed through the double trapped door which gave access to the exterior of the car without permitting the loss of air, and was standing upon what served as the deck of the ship.

In his hand he carried a disintegrator. With a quick motion he sighted it.

As quickly as possible I sprang to his side. I was just in time to note the familiar blue gleam about the instrument, which indicated that its terrific energies were at work. The whirring sound was absent, because here, in open space, where there was no atmosphere, there could be no sound.

My eyes were fixed upon the Martian's engine, which had just dealt us a staggering, but not fatal, blow, and particularly I noticed a polished knob projecting from it which seemed to have been the focus from which its destructive bolt emanated.

A moment later the knob disappeared. The irresistible vibrations darted from the electrical disintegrator and had fallen upon it and instantaneously shattered it into atoms. "That fixes them," said Mr. Edison, turning to me with a smile.

And indeed it did fix them. We had most effectually spiked their gun. It would deal no more death blows.

The doings of the flagship had been closely watched throughout the squadron. The effect of its blow had been evident to all, and a moment later we saw, on some of the nearer ships, men dressed in their air suits, appearing upon the deck, swinging their arms and sending forth soundless cheers into empty space.

The stroke that we had dealt was taken by several of the electrical ships as a signal for a common assault, and we saw two of the Martians fall beside the ruins of their engine, their heads having been blown from their bodies.

"Signal them to stop firing," commanded Mr. Edison. "We have got them down, and we are not going to murder them without necessity."

"Besides," he added, "I want to capture some of them alive."

The signal was given as he had ordered. The flagship then alone dropped slowly toward the place on the asteroid where the prostrate Martians were.

As we got near them a terrible scene unfolded itself to our eyes. There had evidentially been not more than a half dozen of the monsters in the beginning. Two of these were stretched headless upon the ground. Three others had suffered horrible injuries where the invisible vibratory beams from the disintegrators had grazed them, and they could not long survive. One only remained apparently uninjured.

It is impossible for me to describe the appearance of this creature in terms that would be readily understood. Was he like a man? Yes and no. He possessed many human characteristics, but they were exaggerated and monstrous in scale and in detail. His head was of enormous size, and his huge projecting eyes gleamed with a strange fire of intelligence. His face was like a caricature, but not one to make the beholder laugh. Drawing himself up, he towered to a height of at least fifteen feet.

But let the reader not suppose from this inadequate description that the Martians stirred in the beholder precisely the sensation that would be caused by the sight of a gorilla, or other repulsive inhabitant of our terrestrial jungles, suddenly confronting him in its native wilds.

With all his horrible characteristics, and all his suggestions of beast and monster, nevertheless the Martian produced the impression of being a person and not a mere animal.

I have already referred to the enormous size of his head, and to the fact that his countenance bore considerable resemblance to that of a

man. There was something in his face that sent a shiver through the soul of the beholder. One could feel in looking upon it that here was intellect, intelligence developed to the highest degree, but in the direction of evil instead of good.

The sensations of one who had stood face to face with Satan, when he was driven from the battlements of heaven by the swords of his fellow archangels, and had beheld him transformed from Lucifer, the Son of the Morning, into the Prince of Night and Hell, might not have been unlike those which we now experienced as we gazed upon this dreadful personage, who seemed to combine the intellectual powers of a man, raised to their highest pitch, with some of the physical features of a beast, and all the moral depravity of a fiend.

The appearance of the Martian was indeed so threatening and repellent that we paused at the height of fifty feet above the ground, hesitating to approach nearer. A grin of rage and hate overspread his face. If he had been a man I should say he shook his fist at us. What he did was to express in even more telling pantomime his hatred and defiance, and his determination to grind us to shreds if he could once get us within his clutches.

Mr. Edison and I still stood upon the deck of the ship, where several others had gathered around us. The atmosphere of the little asteroid was so rare that it practically amounted to nothing, and we could not possibly have survived if we had not continued to wear our air tight

suits. How the Martians contrived to live here was a mystery to us. It was another of their secrets which we were yet to learn.

Mr. Edison retained his disintegrator in his hand.

"Kill him," said someone. "He is too horrible to live."

"If we do not kill him we shall never be able to land upon the asteroid," said another.

"No," said Mr. Edison. "I shall not kill him. We have got another use for him. Tom," he continued, turning to one of his assistants, whom he had brought from his laboratory, "bring me the anaesthetic."

This was something entirely new to nearly all the members of the expedition. Mr. Edison, however, had confided to me before we left the earth the fact that he had invented a little instrument by means of which a bubble, strongly charged with a powerful anaesthetic agent, could be driven to a considerable distance into the face of an enemy, where exploding without other damage, it would instantly put him to sleep.

When Tom had placed the instrument in his hands Mr. Edison ordered the electrical ship to forge slightly ahead and drop a little lower toward the Martian, who, with watchful eyes and threatening gestures, noted our approach in the attitude of a wild beast on the spring. Suddenly Mr.

Edison discharged from the instrument in his hand a little gaseous globe, which glittered like a ball of tangled rainbows in the sunshine, and darted with astonishing velocity straight into the upturned face of the Martian. It burst as it touched and the monster fell back senseless upon the ground.

"You have killed him!" exclaimed all.

"No," said Mr. Edison. "He is not dead, only asleep. Now we shall drop down and bind him tight before he can awake."

When we came to bind our prisoner with strong ropes we were more than ever impressed with his gigantic stature and strength. Evidentially in single combat with equal weapons he would have been a match for twenty of us.

All that I had read of giants had failed to produce upon my mind the impression of enormous size and tremendous physical energy which the sleeping body of this immense Martian produced. He had fallen on his back, and was in a most profound slumber. All his features were relaxed, and yet even in that condition there was a devilishness about him that made the beholders instinctively shudder.

So powerful was the effect of the anaesthetic which Mr. Edison had discharged into his face that he remained perfectly unconscious while we turned him half over in order the more securely to bind his muscular

limbs.

In the meantime the other electrical ships approached, and several of them made a landing upon the asteroid. Everybody was eager to see this wonderful little world, which, as I have already remarked, was only five miles in diameter.

Several of us from the flagship started out hastily to explore the miniature planet. And now our attention was recalled to an intensely interesting phenomenon which had engaged our thoughts not only when we were upon the moon, but during our flight through space. This was the almost entire absence of weight.

On the moon, where the force of gravitation is one-sixths as great as upon the earth, we had found ourselves astonishingly light. Five-sixths of our own weight, and of the weight of the air-tight suits in which we were encased, had magically dropped from us. It was therefore comparatively easy for us, encumbered, as we were, to make our way about on the moon.

But when we were far from both the earth and the moon, the loss of weight was more astonishing still--not astonishing because we had not known that it would be so, but nevertheless a surprising phenomenon in contrast with our lifelong experience on the earth.

In open space we were practically without weight. Only the mass of the

electrical car in which we were enclosed attracted us, and inside that we could place ourselves in any position without falling. We could float in the air. There was no up and no down, no top and no bottom for us. Stepping outside the car, it would have been easy for us to spring away from it and leave it forever.

One of the most startling experiences that I have ever had was one day when we were navigating space about half way between the earth and Mars. I had stepped outside the car with Lord Kelvin, both of us, of course, wearing our air-tight suits. We were perfectly well aware what would be the consequence of detaching ourselves from the car as we moved along. We should still retain the forward motion of the car, and of course accompany it in its flight. There would be no falling one way or the other. The car would have a tendency to draw us back again by its attraction, but this tendency would be very slight, and practically inappreciable at a distance.

"I am going to step off," I suddenly said to Lord Kelvin. "Of course I shall keep right along with the car, and step aboard again when I am ready."

"Quite right on general principles, young man," replied the great savant, "but beware in what manner you step off. Remember, if you give your body an impulse sufficient to carry it away from the car to any considerable distance, you will be unable to get back again, unless we can catch you with a boathook or a fishline. Out there in empty space

you will have nothing to kick against, and you will be unable to propel yourself in the direction of the car, and its attraction is so feeble that we should probably arrive at Mars before it had drawn you back again."

All this was, of course, perfectly self-evident, yet I believe that but for the warning words of Lord Kelvin I should have been rash enough to step out into empty space, with sufficient force to have separated myself hopelessly from the electrical ship.

As it was, I took good care to retain a hold upon a projecting portion of the car. Occasionally cautiously releasing my grip, I experienced for a few minutes the delicious, indescribable pleasure of being a little planet swinging through space, with nothing to hold me up and nothing to interfere with my motion.

Mr. Edison, happening to come upon the deck of the ship at this time, and seeing what we were about at once said:

"I must provide against this danger. If I do not, there is a chance that we shall arrive at Mars with the ships half empty and the crews floating helplessly around us."

Mr. Edison's way of guarding against the danger was by contriving a little apparatus, modeled after that which was the governing force of the electrical ships themselves, and which, being enclosed in the air-tight suits, enabled their wearers to manipulate the electrical charge upon them in such a way that they could make excursions from the cars into open space like steam launches from a ship, going and returning at their will.

These little machines being rapidly manufactured, for Mr. Edison had a miniature laboratory aboard, were distributed about the squadron, and henceforth we had the pleasure of paying and receiving visits among the various members of the fleet.

But to return from this digression to our experience of the asteroid. The latter being a body of some mass was, of course, able to impart to us a measurable degree of weight. Being five miles in diameter, on the assumption that its mean density was the same as that of the earth, the weight of bodies on its surface should have borne the same ratio to their weight upon the earth that the radius of the asteroid bore to the radius of the earth; in other words, as 1 to 1,600.

Having made this mental calculation, I knew that my weight, being 150 pounds on the earth, should on this asteroid be an ounce and a half.

Curious to see whether fact would bear out theory, I had myself weighed with a spring balance. Mr. Edison, Lord Kelvin and the other distinguished scientists stood by watching the operation with great interest.

To our complete surprise, my weight instead of coming out an ounce and a half, as it should have done, on the supposition that the mean density of the asteroid resembled that of the earth--a very liberal supposition on the side of the asteroid, by the way--actually came out five ounces and a quarter!

"What in the world makes me so heavy?" I asked.

"Yes, indeed, what an elephant you have become," said Mr. Edison.

Lord Kelvin screwed his eyeglass in his eye, and carefully inspected the balance.

"It's quite right," he said. "You do indeed weigh five ounces and a quarter. Too much; altogether too much," he added. "You shouldn't do it, you know."

"Perhaps the fault is in the asteroid," suggested Professor Sylvanus P. Thompson.

"Quite so," exclaimed Lord Kelvin, a look of sudden comprehension overspreading his features. "No doubt it is the internal constitution of the asteroid which is the cause of the anomaly. We must look into that. Let me see? This gentleman's weight is three and one-half times as great as it ought to be. What element is there whose density exceeds the mean density of the earth in about that proportion?"

"Gold," exclaimed one of the party.

For a moment we were startled beyond expression. The truth had flashed upon us.

This must be a golden planet this little asteroid. If it were not composed internally of gold it could never have made me weight three times more than I ought to weight.

"But where is the gold?" cried one.

"Covered up, of course," said Lord Kelvin. "Buried in Stardust. This asteroid could not have continued to travel for millions of years through legions of space strewn with meteoric particles without becoming covered with the inevitable dust and grime of such a journey. We must dig now, and then doubtless we shall find the metal."

This hint was instantly acted upon. Something that would serve as a spade was seized by one of the men, and in a few minutes a hole had been dug in the comparatively light soil of the asteroid.

I shall never forget the sight, nor the exclamations of wonder that broke forth from all of us standing around, when the yellow gleam of the precious metal appeared under the "star dust." Collected in huge masses it reflected the light of the sun from its hiding place.

Evidently the planet was not a solid ball of gold, formed like a bullet run in a mold, but was composed of nuggets of various sizes, which had come together here under the influence of their mutual gravitation, and formed a little metallic planet.

Judging by the test of weight which we had already tried, and which had led to the discovery of the gold, the composition of the asteroid must be the same to its very center.

In an assemblage of famous scientific men such as this the discovery of course, immediately led to questions as to the origin of this incredible phenomenon.

How did these masses of gold come together? How did it chance that, with the exception of the thin crust of the asteroid nearly all its substance was composed of the precious metal?

One asserted that it was quite impossible that there should be so much gold at so great a distance from the sun.

"It is the general law," he said, "that the planets increase in density towards the sun. There is every reason to think that the inner planets possess the greater amount of dense elements, while the outer ones are comparatively light."

But another referred to the old theory that there was once in this part of the solar system a planet which had been burst in pieces by some mysterious explosion, the fragments forming what we know as the asteroids. In his opinion, this planet might have contained, a large quantity of gold, and in the course of ages the gold, having, in consequence of its superior atomic weight, not being so widely scattered by the explosion as some of the other elements of the planet, had collected itself together in this body.

But I observed that Lord Kelvin and the other more distinguished men of science said nothing during this discussion. The truly learned man is the truly wise man. They were not going to set up the theories without sufficient facts to substain them. The one fact that the gold was here was all they had at present. Until they could learn more they were not prepared to theorize as to how the gold got there.

And in truth, it must be confessed, the greater number of us really cared less for the explanation of the wonderful fact than we did for the fact itself.

Gold is a thing which may make its appearance anywhere and at any time without offering any excuses or explanations.

"Phew! Won't we be rich?" exclaimed a voice.

"How are we going to dig it and get it back to earth?" asked another.

"Carry it in your pockets," said one.

"No need of staking claims here," remarked another. "There is enough for everybody."

Mr. Edison suddenly turned the current of talk.

"What do you suppose those Martians were doing here?"

"Why, they were wrecked here."

"Not a bit of it," said Mr. Edison. "According to your own showing they could not have been wrecked here. This planet hasn't gravitation enough to wreck them by a fall, and besides I have been looking at their machines and I know there has been a fight."

"A fight?" exclaimed several, pricking up their ears.

"Yes," said Mr. Edison. "Those machines bear the marks of the lightning of the Martians. They have been disabled, but they are made of some metal or some alloy of metals unknown to me, and consequently they have withstood the destructive force applied to them, as our electric ships were unable to withstand it. It is perfectly plain to me that they have been disabled in a battle. The Martians must have been fighting among themselves."

"About the gold!" exclaimed one.

"Of course. What else was there to fight about?"

At this instant one of our men came running from a considerable distance, waving his arms excitedly, but unable to give voice to his story, in the inappreciable atmosphere of the asteroid, until he had come up and made telephonic connection with us.

"There are a lot of dead Martians over there," he said. "They've been cleaning one another out."

"That's it," said Mr. Edison. "I knew it when I saw the condition of those machines."

"Then this is not a wrecked expedition, directed against the earth?"

"Not at all."

"This must be the great gold mine of Mars," said the president of an Australian mining company, opening both his eyes and his mouth as he spoke.

"Yes, evidently that's it. Here's where they come to get their wealth."

"And this," I said, "must be their harvest time. You notice that this asteroid, being several million miles nearer to the sun than Mars is, must have an appreciably shorter period of revolution. When it is in conjunction with Mars, or nearly so, as it is at present, the distance between the two is not very great, whereas when it is in the opposite part of its orbit they are separated by an enormous gap in space and the sun is between them.

"Manifestly in the latter case it would be perilous if not entirely impossible for the Martians to visit the golden asteroid, but when it is near Mars, as it is at present, and as it must be periodically for several years at a time, then is their opportunity.

"With their projectile cars sent forth with the aid of the mysterious explosives which they possess, it is easy for them under such circumstances, to make visits to the asteroid.

"Having obtained all the gold they need or all that they can carry, a comparatively slight impulse given to their car, the direction of which is carefully calculated, will carry them back again to Mars."

"If that's so," exclaimed a voice, "we had better look out for ourselves! We have got into a very hornet's nest! If this is the place where the Martians come to dig gold, and if this is the height of their season, as you say, they are not likely to leave us here long undisturbed."

"These fellows must have been pirates that they had the fight with," said another.

"But what's become of the regulars, then?"

"Gone back to Mars for help, probably, and they'll be here again pretty quick, I am afraid!"

Considerable alarm was caused by this view of the case, and orders were sent to several of the electrical ships to cruise out to a safe distance in the direction of Mars and keep a sharp outlook for the approach of enemies.

Meanwhile our prisoner awoke. He turned his eyes upon those standing about him, without any appearance of fear, but rather with a look of contempt, like that which Gulliver must have felt for the Lilliputians who had bound him under similar circumstances.

There were both hatred and defiance in his glance. He attempted to free himself, and the ropes strained with the tremendous pressure that he put upon them, but he could not break loose.

Satisfied that the Martian was safely bound, we left him where he lay, and, while awaiting news from the ships which had been sent to reconnoitre, continued the exploration of the little planet.

At a point nearly opposite to that where we had landed we came upon the mine which the Martians had been working. They had removed the thin coating of soil, laying bare the rich stores of gold beneath, and large quantities of the latter had been removed. Some of it was so solidly packed that the strokes of the instruments by means of which they had detached it were visible like the streaks left by a knife cutting cheese.

The more we saw of this golden planet the greater became our astonishment. What the Martians had removed was a mere nothing in comparison with the entire bulk of the asteroid. Had the celestial mine been easier to reach, perhaps they would have removed more, or, possibly, their political economists perfectly understood the necessity of properly controlling the amount of precious metal in circulation. Very likely, we thought, the mining operations were under government control in Mars and it might be that the majority of the people there knew nothing of this store of wealth floating in the firmament. That would account for the battle with the supposed pirates, who, no doubt had organized a secret expedition to the asteroid and had been caught red-handed at the mine.

There were many detached masses of gold scattered about, and some of the men, on picking them up, exclaimed with astonishment at their lack of weight, forgetting for the moment that the same law which caused their own bodies to weigh so little must necessarily affect everything else in

a like degree.

A mass of gold that on the earth no man would have been able to lift could here be tossed about like a hollow rubber ball.

While we were examining the mine, one of the men left to guard the Martian came running to inform us that the latter evidently wished to make some communication. Mr. Edison and the others hurried to the side of the prisoner. He still lay on his back, from which position he was not able to move, notwithstanding all his efforts. But by the motion of his eyes, aided by the pantomime with his fingers, he made us understand that there was something in a metallic box fastened at his side which he wished to reach.

With some difficulty we succeeded in opening the box and in it there appeared a number of bright red pellets, as large as an ordinary egg.

When the Martians saw these in our hands he gave us to understand by the motion of his lips that he wished to swallow one of them. A pellet was accordingly placed in his mouth, and he instantly and with great eagerness swallowed it.

While trying to communicate his wishes to us, the prisoner had seemed to be in no little distress. He exhibited spasmodic movements which led some of the bystanders to think that he was on the point of dying, but within a few seconds after he had swallowed the pellet he appeared to be

completely restored. All evidence of distress vanished, and a look of content came over his ugly face.

"It must be a powerful medicine," said one of the bystanders. "I wonder what it is?"

"I will explain to you my notion," said Professor Moissan, the great French chemist. "I think it was a pill of the air, which he has taken."

"What do you mean by that?"

"My meaning is," said Professor Moissan, "that the Martian must have, for that he may live, the nitrogen and the oxygen. These can he not obtain here, where there is not the atmosphere. Therefore must he get them in some other manner. This has he managed to do by combining in these pills the oxygen and the nitrogen in the proportions which make atmospheric air. Doubtless upon Mars there are the very great chemists. They have discovered how this may be done. When the Martian has swallowed his little pill, the oxygen and the nitrogen are rendered to his blood as if he had breathed them, and so he can live with that air which has been distributed to him with the aid of his stomach in place of his lungs."

If Monsieur Moissan's explanation was not correct, at any rate it seemed the only one which would fit the facts before us. Certainly the Martian could not breathe where there was practically no air, yet just as certainly after he had swallowed his pill he seemed as comfortable as any of us.

Suddenly, while we were gathered around the prisoner, and interested in this fresh evidence of the wonderful ingenuity of the Martians, and of their control over the processes of nature, one of the electrical ships that had been sent off in the direction of Mars was seen rapidly returning and displaying signals.

It reported that the Martians were coming!