CHAPTER EIGHT

"THE MARTIANS ARE COMING!"

The alarm was spread instantly among those upon the planet and through the remainder of the fleet.

One of the men from the returning electrical ship dropped down upon the asteroid and gave a more detailed account of what they had seen.

His ship had been the one which had gone to the greatest distance, in the direction of Mars. While cruising there, with all eyes intent, they had suddenly perceived a glittering object moving from the direction of the ruddy planet, and manifestly approaching them. A little inspection with the telescope had shown them that it was one of the projectile cars used by the Martians.

Our ship had ventured so far from the asteroid that for a moment it seemed doubtful whether it would be able to return in time to give warning, because the electrical influence of the asteroid was comparatively slight at such a distance, and, after they had reversed their polarity, and applied their intensifier, so as to make that influence effective, their motion was at first exceedingly slow.

Fortunately after a time they got under way with sufficient velocity to

bring them back to us before the approaching Martians could overtake them.

The latter were not moving with great velocity, having evidently projected themselves from Mars with only just sufficient force to throw them within the feeble sphere of gravitation of the asteroid, so that they should very gently land upon its surface.

Indeed, looking out behind the electrical ship which had brought us the warning, we immediately saw the projectile of the Martians approaching. It sparkled like a star in the black sky as the sunlight fell upon it.

The ships of the squadron whose crews had not landed upon the planet were signaled to prepare for action, while those who were upon the asteroid made ready for battle there. A number of disintegrators were trained upon the approaching Martians, but Mr. Edison gave strict orders that no attempt should be made to discharge the vibratory force at random.

"They do not know that we are here," he said, "and I am convinced that they are unable to control their motions as we can do with our electrical ships. They depend simply upon the force of gravitation. Having passed the limit of the attraction of Mars, they have now fallen within the attraction of the asteroid, and they must slowly sink to its surface.

"Having, as I am convinced, no means of producing or controlling electrical attraction and repulsion, they cannot stop themselves, but must come down upon the asteroid. Having got here, they could never get away again, except as we know the survivors got away from earth, by propelling their projectile against gravitation with the aid of an explosive.

"Therefore, to a certain extent they will be at our mercy. Let us allow them quietly to land upon the planet, and then I think, if it becomes necessary, we can master them."

Notwithstanding Mr. Edison's reassuring words and manner, the company upon the asteroid experienced a dreadful suspense while the projectile which seemed very formidable as it drew near, sank with a slow and graceful motion toward the surface of the ground. Evidently it was about to land very near the spot where we stood awaiting it.

Its inmates had apparently just caught sight of us. They evinced signs of astonishment, and seemed at a loss exactly what to do. We could see projecting from the fore part of their car at least two of the polished knobs, whose fearful use and power we well comprehended.

Several of our men cried out to Mr. Edison in an extremity of terror:

"Why do you not destroy them? Be quick, or we shall all perish."

"No," said Mr. Edison, "there is no danger. You can see that they are not prepared. They will not attempt to attack us until they have made their landing."

And Mr. Edison was right. With gradually accelerated velocity, and yet very, very slowly in comparison with the speed they would have exhibited in falling upon such a planet as the earth, the Martians and their car came down to the ground.

We stood at a distance of perhaps three hundred feet from the point where they touched the asteroid. Instantly a dozen of the giants sprang from the car and gazed about for a moment with a look of intense surprise. At first it was doubtful whether they meant to attack us at all.

We stood on our guard, several carrying disintegrators in our hands, while a score more of these terrible engines were turned upon the Martians from the electrical ships which hovered near.

Suddenly he who seemed to be the leader of the Martians began to speak to them in pantomime, using his fingers after the manner in which they are used for conversation by deaf and dumb people.

Of course, we did not know what he was saying, but his meaning became perfectly evident a minute later. Clearly they did not comprehend the powers of the insignificant looking strangers with whom they had to

deal. Instead of turning their destructive engines on us, they advanced on a run, with the evident purpose of making us prisoners or crushing us by main force.

The soft whirr of the disintegrator in the hands of Mr. Edison standing near me came to my ears through the telephonic wire. He quickly swept the concentrating mirror a little up and down, and instantly the foremost Martian vanished! Part of some metallic dress that he wore fell upon the ground where he had stood, its vibratory rate not having been included in the range imparted to the disintegrator.

His followers paused for a moment, amazed, stared about as if looking for their leader, and then hurried back to their projectile and disappeared within it.

"Now we've got business on our hands," said Mr. Edison. "Look out for yourselves."

As he spoke, I saw the death-dealing knob of the war engine contained in the car of the Martians moving around toward us. In another instant it would have launched its destroying bolt.

Before that could occur, however, it had been dissipated into space by a vibratory stream from a disintegrator.

But we were not to get the victory quite so easily. There was another of

the war engines in the car, and before we could concentrate our fire upon it, its awful flash shot forth, and a dozen of our comrades perished before our eyes.

"Quick! Quick!" shouted Mr. Edison to one of his electrical experts standing near. "There is something the matter with this disintegrator, and I cannot make it work. Aim at the knob, and don't miss it."

But the aim was not well taken, and the vibratory force fell upon a portion of the car at a considerable distance from the knob, making a great breach, but leaving the engine uninjured.

A section of the side of the car had been destroyed, and the vibratory energy had spread no further. To have attempted to sweep the car from end to end would have been futile, because the period of action of the disintegrators during each discharge did not exceed one second, and distributing the energy over so great a space would have seriously weakened its power to shatter apart the atoms of the resisting substance. The disintegrators were like firearms, in that after each discharge they must be readjusted before they could be used again.

Through the breach we saw the Martians inside making desperate efforts to train their engine upon us, for after their first disastrous stroke we had rapidly shifted our position. Swiftly the polished knob, which gleamed like an evil eye, moved round to sweep over us. Instinctively, though incautiously, we had collected in a group.

A single discharge would sweep us all into eternity.

"Will no one fire upon them?" exclaimed Mr. Edison, struggling with the disintegrator in his hands which still refused to work.

At this fearful moment I glanced around upon our company, and was astonished at the spectacle. In the presence of the danger many of them had lost all self-command. A half dozen had dropped their disintegrators upon the ground. Others stood as if frozen fast in their tracks. The expert electrician, whose poor aim had had such disastrous results, held in his hand an instrument which was in perfect condition, yet with mouth agape, he stood trembling like a captured bird.

It was a disgraceful exhibition. Mr. Edison, however, had not lost his head. Again and again he sighted at the dreadful knob with his disintegrator, but the vibratory force refused to respond.

The means of safety were in our hands, and yet through a combination of ill luck and paralyzing terror, we seemed unable to use them.

In a second more it would be all over with us.

The suspense in reality lasted only during the twinkling of an eye, though it seemed ages long.

Unable to endure it, I sharply struck the shoulder of the paralyzed electrician. To have attempted to seize the disintegrator from his hands would have been a fatal waste of time. Luckily the blow either roused him from his stupor or caused an instinctive movement of his hand that set the little engine in operation.

I am sure he took no aim, but providentially the vibratory force fell upon the desired point, and the knob disappeared.

We were saved!

Instantly half a dozen rushed toward the car of the Martians. We bitterly repented their haste; they did not live to repent.

Unknown to us the Martians carried hand engines, capable of launching bolts of death of the same character as those which emanated from the knobs of their larger machines. With these they fired, so to speak, through the breach in their car, and four of our men who were rushing upon them fell in heaps of cinders. The effect of the terrible fire was like that which the most powerful strokes of lightning occasionally produce on earth.

The destruction of the threatening knob had instantaneously relieved the pressure upon the terror-stricken nerves of our company, and they had all regained their composure and self-command. But this new and unexpected disaster, following so close upon the fear which had recently

overpowered them, produced a second panic, the effect of which was not to stiffen them in their tracks as before, but to send them scurrying in every direction in search of hiding places.

And now a most curious effect of the smallness of the planet we were on began to play a conspicuous part in our adventures. Standing on a globe only five miles in diameter was like being on the summit of a mountain whose sides sloped rapidly off in every direction, disappearing in the black sky on all sides, as if it were some stupendous peak rising out of an unfathomable abyss.

In consequence of the quick rounding off of the sides of this globe, the line of the horizon was close at hand, and by running a distance of less that 250 yards the fugitives disappeared down the sides of the asteroid, and behind the horizon, even from the elevation of about fifteen feet from which the Martians were able to watch them. From our sight they disappeared much sooner.

The slight attraction of the planet and their consequent almost entire lack of weight enabled the men to run with immense speed. The result, as I have subsequently learned, was that after they had disappeared from our view they quitted the planet entirely, the force being sufficient to partially free them from its gravitation, so that they sailed out into space, whirling helplessly end over end, until the elliptical orbits in which they travelled eventually brought them back again to the planet on the side nearly opposite to that from which they had departed.

But several of us, with Mr. Edison, stood fast, watching for an opportunity to get the Martians within range of the disintegrators. Luckily we were enabled, by shifting our position a little to the left, to get out of the line of sight of our enemies concealed in the car.

"If we cannot catch sight of them," said Mr. Edison, "we shall have to riddle the car on the chance of hitting them."

"It will be like firing into a bush to kill a hidden bear," said one of the party.

But help came from a quarter which was unexpected to us, although it should not have been so. Several of the electric ships had been hovering above us during the fight, their commanders being apparently uncertain how to act--fearful, perhaps, of injuring us in the attempt to smite our enemy.

But now the situation apparently lightened for them. They saw that we were at an immense disadvantage, and several of them immediately turned their batteries upon the car of the Martians.

They riddled it far more quickly and effectively than we could have done. Every stroke of the vibratory emanation made a gap in the side of the car, and we could perceive from the commotion within that our enemies were being rapidly massacred in their fortification.

So overwhelming was the force and the advantage of the ships that in a little while it was all over. Mr. Edison signaled them to stop firing because it was plain that all resistance had ceased and probably not one of the Martians remained alive.

We now approached the car, which had been transpierced in every direction, and whose remaining portions were glowing with heat in consequence of the spreading of the atomic vibrations. Immediately we discovered that all our anticipations were correct and that all of our enemies had perished.

The effect of the disintegrators upon them had been awful--too repulsive, indeed, to be described in detail. Some of the bodies had evidently entirely vanished; only certain metal articles which they had worn remaining, as in the case of the first Martian killed, to indicate that such beings had ever existed. The nature of the metal composing these articles was unknown to us. Evidently its vibratory rhythm did not correspond with any included in the ordinary range of the disintegrators.

Some of the giants had been only partially destroyed, the vibratory current having grazed them, in such a manner that the shattering undulations had not acted upon the entire body.

One thing that lends a peculiar horror to a terrestrial battlefield was

absent; there was no bloodshed. The vibratory energy, not only completely destroyed whatever it fell upon but it seared the veins and arteries of the dismembered bodies so that there was no sanguinary exhibition connected with its murderous work.

All this time the shackled Martian had lain on his back where we had left him bound. What his feeling must have been may be imagined. At times, I caught a glimpse of his eyes, wildly rolling and exhibiting, when he saw that the victory was in our hands, the first indications of fear and terror shaking his soul that had yet appeared.

"That fellow is afraid at last," I said to Mr. Edison.

"Well, I should think he ought to be afraid," was the reply.

"So he ought, but if I am not mistaken this fear of his may be the beginning of a new discovery for us."

"How so?" asked Mr. Edison.

"In this way. When once he fears our power, and perceives that there would be no hope of contending against us, even if he were at liberty, he will respect us. This change in his mental attitude may tend to make him communicative. I do not see why we should despair of learning his language from him, and having done that, he will serve as our guide and interpreter, and will be of incalculable advantage to us when we have

arrived at Mars."

"Capital! Capital!" said Mr. Edison. "We must concentrate the linguistic genius of our company upon that problem at once."

In the meantime some of the skulkers whose flight I have referred to began to return, crestfallen, but rejoicing in the disappearance of the danger. Several of them, I am ashamed to say, had been army officers. Yet possibly some excuse could be made for the terror by which they had been overcome. No man has a right to hold his fellow beings to account for the line of conduct they may pursue under circumstances which are not only entirely unexampled in their experience, but almost beyond the power of the imagination to picture.

Paralyzing terror had evidently seized them with the sudden comprehension of the unprecedented singularity of their situation. Millions of miles away from the earth, confronted on an asteroid by these diabolical monsters from a maleficent planet, who were on the point of destroying them with a strange torment of death--perhaps it was really more than human nature, deprived of the support of human surroundings, could be expected to bear.

Those who, as already described, had run with so great a speed that they were projected, all unwilling, into space, rising in elliptical orbits from the surface of the planet, describing great curves in what might be denominated its sky, and then coming back again to the little globe on

another side, were so filled with the wonders of their remarkable adventure that they had almost forgotten the terror which had inspired it.

There was nothing surprising in what had occurred to them the moment one considered the laws of gravitation on the asteroid, but their stories aroused an intense interest among all who listened to them.

Lord Kelvin was particularly interested, and while Mr. Edison was hastening preparations to quit the asteroid and resume our voyage to Mars, Lord Kelvin and a number of other scientific men instituted a series of remarkable experiments.

It was one of the most laughable things imaginable to see Lord Kelvin, dressed in his air-tight suit, making tremendous jumps in empty space. It reminded me forcibly of what Lord Kelvin, then plain William Thompson, and Professor Blackburn had done when spending a summer vacation at the seaside, while they were undergraduates of Cambridge University. They had spent all their time, to the surprise of onlookers, in spinning rounded stones on the beach, their object being to obtain a practical solution of the mathematical problem of "precession."

Immediately Lord Kelvin was imitated by a dozen others. With what seemed very slight effort they projected themselves straight upwards, rising to a height of four hundred feet or more, and then slowly settling back again to the surface of the asteroid. The time of rise and fall combined

was between three and four minutes.

On this little planet the acceleration of gravity or the velocity acquired by a falling body in one second was only four-fifths of an inch. A body required an entire minute to fall a distance of only 120 feet. Consequently, it was more like gradually settling than falling. The figures of these men of science, rising and sinking in this manner, appeared like so many gigantic marionettes bobbing up and down in a pneumatic bottle.

"Let us try that," said Mr. Edison, very much interested in the experiments.

Both of us jumped together. At first, with great swiftness, but gradually losing speed, we rose to an immense height straight from the ground. When we had reached the utmost limit of our flight we seemed to come to rest for a moment, and then began slowly, but with accelerated velocity, to sink back again to the planet. It was not only a peculiar but a delicious sensation, and but for strict orders which were issued that the electrical ships should be immediately prepared for departure, our entire company might have remained for an indefinite period enjoying this new kind of athletic exercise in a world where gravitation had become so humble that it could be trifled with.

While the final preparations for departure were being made, Lord Kelvin instituted other experiments that were no less unique in their results.

The experience of those who had taken unpremeditated flights in elliptical orbits when they had run from the vicinity of the Martians suggested the throwing of solid objects in various directions from the surface of the planet in order to determine the distance they would go and the curves they would describe in returning.

For these experiments there was nothing more convenient or abundant than chunks of gold from the Martians' mine. These, accordingly, were hurled in different directions and with every degree of velocity. A little calculation had shown that an initial velocity of thirty feet per second imparted to one of these chunks, moving at right angles to the radius of the asteroid, would, if the resistance of an almost inappreciable atmosphere were neglected, suffice to turn the piece of gold into a little satellite that would describe an orbit around the asteroid, and continue to do so forever, or at least until the slight atmospheric resistance should eventually bring it down to the surface.

But a less velocity than thirty feet per second would cause the golden missile to fly only part way around, while a greater velocity would give it an elliptical instead of a circular orbit, and in this ellipse it would continue to revolve around the asteroid in the character of a satellite.

If the direction of the original impulse were at more than a right angle to the radius of the asteroid, then the flying body would pass out to a greater or less distance in space in an elliptical orbit, eventually

coming back again and falling upon the asteroid, but not at the same spot from which it had departed.

So many took part in these singular experiments, which assumed rather the appearance of outdoor sports than of scientific demonstrations, that in a short time we had provided the asteroid with a very large number of little moons, or satellites, of gold, which revolved around it in orbits of various degrees of ellipticity, taking, on the average, about three-quarters of an hour to complete a circuit. Since, on completing a revolution, they must necessarily pass through the point from which they started, they kept us constantly on the qui vive to avoid being knocked over by them as they swept around in their orbits.

Finally the signal was given for all to embark, and with great regret the savants quitted their scientific games, and prepared to return to the electric ships.

Just on the moment of departure, the fact was announced by one, who had been making a little calculation on a bit of paper, that the velocity with which a body must be thrown in order to escape forever the attraction of the asteroid, and to pass on to an infinite distance in any direction, was only about forty-two feet in a second.

Manifestly it would be quite easy to impart such a speed as that to the chunks of gold that we held in our hands.

"Hurrah!" exclaimed one. "Let's send some of this back to the earth."

"Where is the earth?" asked another.

Being appealed to, several astronomers turned their eyes in the direction of the sun, where the black firmament was ablaze with stars, and in a moment recognized the earth-star shining there, with the moon attending close at hand.

"There," said one, "is the earth. Can you throw straight enough to hit it?"

"We'll try," was the reply, and immediately several threw huge golden nuggets in the direction of our far-away world, endeavoring to impart to them at least the required velocity of forty-two feet in a second, which would insure their passing beyond the attraction of the asteroid, and if there should be no disturbance on the way, and the aim were accurate, their eventual arrival upon the earth.

"Here's for you, Old Earth," said one of the throwers, "good luck, and more gold to you!"

If these precious missiles ever reached the earth we knew that they would plunge into the atmosphere like meteors and that probably the heat developed by their passage would melt and dissipate them in golden vapors before they could touch the ground.

Yet there was a chance that some of them--if the aim were true--might survive the fiery passage through the atmosphere and fall upon the surface of our planet where, perhaps, they would afterward be picked up by a prospector and lead him to believe that he had struck a new bonanza.

But until we returned to the earth it would be impossible for us to tell what had become of the golden gifts which we had launched into space for our mother planet.