EDISON'S CONQUEST OF MARS

By Garrett P. Serviss.

SYNOPSIS OF PREVIOUS CHAPTERS.

Chapter I.—The inhabitants of Mars having invaded the earth, inflicting great damage, and it becoming apparent that they are preparing for a new attack, Thomas A. Edison invents an electrical ship capable of carrying the war to Mars.

Chapter II.—Mr. Edison also invents a weapon called the disintegrator, which by vibratory force causes any object at which it is fired to dissolve. A conclave of nations is called for the purpose of raising funds to build and equip the airships.

Chapter III.—Rulers meet at Washington and raise the required means.

CHAPTER IV.

Not less than 5,000,000 people had assembled at Washington from all part of the world. Every one of this immense multitude had been able to listen to the speeches and the cheers in the senate chamber, although not personally present there. Wires had been run all over the city and hundreds of improved telephonic receivers provided so that every one could hear. Even those who were unable to visit Washington—people living in Baltimore, New York Boston and as far away as New Orleans St. Louis and Chicago—had also listened to the proceedings with the aid of these receivers. Upon the whole, probably not less than 50,000,000 people had heard the deliberations of the great congress of the nations.

The telegraph and the cable had sent the news across the oceans to all the capitals of the earth. The exultation was so great that the people seemed mad with joy.

The promised exhibition of the electrical ship took place the next day. Enormous multitudes witnessed the experiment, and there was a struggle for places in the car. Even Queen Victoria, accompanied by the Prince of Wales, ventured to take a ride in it, and they enjoyed it so much that Mr. Edison prolonged the journey as far as Boston and the Bunker Hill monument.

Most of the other monarchs also took a high ride, but when the turn of the emperor of China came he repeated a fable which he said had come down from the time of Confucius:

"Once upon a time there was a Chinaman living in the valley of the Hoang-Ho river who was accustomed frequently to lie on his back, gazing at and envying the birds that he saw flying away in the sky. One day he saw a black speck which rapidly grew larger and larger, until as it got near he perceived that it was an enormous bird which overshadowed the earth with its wings. It was the elephant of birds, the roc. 'Come with me,' said the roc, 'and I will show you the wonders of the kingdom of the birds.' The man caught hold of its claw and nestled among its feathers, and they rapidly rose high in the air and sailed away to the Kuen Lun mountains. Here, as they passed near the top of the peaks, another roc made its appearance. The wings of the two great birds brushed together and immediately they fell to fighting. In the midst of the melee the man lost his hold and tumbled into the top of a tree where his pigtail caught on a branch and he remained suspended. There the unfortunate man hung helpless until a rat which had its home in the rocks at the foot of the tree took compassion upon him, and, climbing up, gnawed off the branch. As the man slowly and painfully wended his weary way homeward, he said, 'This teaches me that creatures to whom nature has given neither feathers nor wings should leave the kingdom of the birds to those who are fitted to inhabit it.'"

Having told this story, Tsait'sien turned his back on the electrical ship.

After the exhibition was finished, and amid the fresh outburst of enthusiasm that followed, it was suggested that a proper way to wind up the congress and give suitable expression to the festive mood which now possessed mankind would be to have a grand ball. This suggestion met with immediate and universal approval.

But for so gigantic an affair it was, of course, necessary to make special preparations. A convenient place was selected on the Virginian side of the Potomac. A space of ten acres was carefully leveled and covered with a polished floor, rows of columns 100 feet apart were run across it in every direction, and these were decorated with electric lights, displaying every color of the spectrum.

Above this immense space, rising in the center to a height of more than 1,000 feet, was anchored a vast number of balloons, all aglow with lights and forming a tremendous dome, in which brilliant lamps were arranged in such a manner as to exhibit in an endless succession of combinations all the national colors, ensigns and insignia of the various countries represented at the congress. Blazing eagles, lions, unicorns, dragons and other imaginary creatures that the different nations had chosen for their symbols appeared to hover high above the dancers, shedding a brilliant light upon the scene.

Circles of magnificent thrones were placed upon the floor in convenient locations for seeing. A thousand bands of music played, and tens of thousands of couples, gayly dressed and flashing with gems, whirled together upon the polished floor.

The queen of England led the dance on the arm of the president of the United States.

The Prince of Wales led forth the fair daughter of the president, universally admired as the most beautiful woman upon the great ballroom floor.

The Emperor William, in his military dress, danced with the beauteous Princess Masaco, the daughter of the mikado, who wore for the occasion the ancient costume of the women of her country, sparkling with jewels and glowing with quaint combinations of color like a gorgeous butterfly.

The Chinese emperor, with his pigtail flying high as he spun, danced with the empress of Russia.

The king of Siam essayed a waltz with Queen Ranavalona of Madagascar, while the sultan of Turkey basked in the smiles of a Chicago heiress to $100,000,000.

The czar chose for his partner a dark eyed beauty from Peru, but King Malietoa of Samoa was suspicious of civilized charmers and, avoiding all of their allurements, expressed his joy and gave vent to his enthusiasm in a pas seul. In this he was quickly joined by a band of Sioux Indian chiefs, whose whoops and yells so startled the leader of a German band on their part of the floor that he dropped his baton and, followed by the musicians, took to his heels.

This incident amused the good natured emperor of China more than anything else that had occurred.

"Makee muchee noisee," he said, indicating the fleeing musicians with his thumb. "Allee samee muchee flaid noisee," and then his round face dimpled into another laugh.

The scene from the outside was even more imposing than that which greeted the eye within the brilliantly lighted inclosure. Far away in the night, rising high among the stars, the vast dome of illuminated balloons seemed like some supernatural creation, too grand and glorious to have been constructed by the inhabitants of the earth.

All round it, and from some of the balloons themselves, rose jets and fountains of fire, ceaselessly playing, and blotting out the constellations of the heavens by their splendor.

The dance was followed by a grand banquet, at which the Prince of Wales proposed a toast to Mr. Edison.

"It gives me much pleasure," he said, "to offer, in the name of the nations of the old world, this tribute of our admiration for, and our confidence in, the genius of the new world. Perhaps on such an occasion as this, when all racial differences and prejudices ought to be, and are, buried and forgotten, I should not recall anything that might revive them, yet I cannot refrain from expressing my happiness in knowing that the champion who is to achieve the salvation of the earth has come forth from the bosom of the Anglo-Saxon race."

Several of the great potentates looked grave upon hearing the Prince of Wales' words, and the czar and the kaiser exchanged glances, but there was no interruption to the cheers that followed. Mr. Edison, whose modesty and dislike to display and to speechmaking were well known, simply said:

"I think we have got the machine that can whip them. But we ought not to be wasting any time. Probably they are not dancing on Mars, but are getting ready to make us dance."

These words instantly turned the current of feeling in the vast assembly. There was no longer any disposition to expend time in vain greetings and re-

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joicings. Everywhere the cry now became: "Let us make haste. Let us get ready at once. Who knows but the Martians have already embarked and are now on their way to destroy us?"

Under the impulse of this new feeling, which, it must be admitted, was very largely inspired by terror, the vast ballroom was quickly deserted. The lights were suddenly put out in the great dome of balloons, for some one had whispered:

"Suppose they should see that from Mars? Would they not guess what we were about and redouble their preparations to finish us?"

Upon the suggestion of the president of the United States an executive committee, representing all the principal nations, was appointed, and without delay a meeting of this committee was assembled at the White House. Mr. Edison was summoned before it and was asked to sketch briefly the plan upon which he proposed to work.

I need not enter into the details of what was done at this meeting. Let it suffice to say that when it broke up in the small hours of the morning it had been unanimously resolved that as many thousands of men as Mr. Edison might require should be immediately placed at his disposal; that as far as possible all the great manufacturing establishments of the country should be instantly transformed into factories where electrical ships and disintegrators could be built, and upon the suggestion of Professor Sylvanus P. Thompson, the celebrated English electrical expert, seconded by Lord Kelvin, it was resolved that all the leading men of science in the world should place their services at the disposal of Mr. Edison in any capacity in which, in his judgment, they might be useful to him.

The members of this committee were disposed to congratulate one another on the good work which they had so promptly accomplished, when at the moment of their adjournment a telegraphic dispatch was handed to the president from Professor George E. Hale, the director of the great Yerkes observatory in Wisconsin. The telegram read:

"Professor Barnard, watching Mars tonight with the 40 inch telescope, saw a sudden outburst of reddish light, which we think indicates that something has been shot from the planet. Spectroscopic observations of this moving light indicated that it was coming earthward while visible at the rate of not less than 100 miles a second."

Hardly had the excitement caused by the reading of this dispatch subsided when others of a similar import came from the Lick observatory in California, from the branch of the Harvard observatory at Arequipa, in Peru, and from the royal observatory at Potsdam.

When the telegram from this last named place was read, the Emperor William turned to his chancellor and said:

"I want to go home. If I am to die, I prefer to leave my bones among those of my imperial ancestors and not in this vulgar country, where no king has ever ruled. I don't like this atmosphere. It makes me feel limp."

CHAPTER V.

And now, whipped on by the lash of alternate hope and fear, the earth sprang to its work of preparation.

It is not necessary for me to describe the manner in which Mr. Edison performed his tremendous task. He was as good as his word, and within six months from the first stroke of the hammer 100 electrical ships, each provided with a full battery of disintegrators, were floating in the air above the harbor and the partially rebuilt city of New York.

It was a wonderful scene. The polished sides of the huge floating cars sparkled in the sunlight, and as they slowly rose and fell and swung this way and that upon the tides of the air as if held by invisible cables the brilliant pennons streaming from their peaks waved up and down like the wings of an assemblage of gigantic humming birds.

Not knowing whether the atmosphere of Mars would prove suitable to be breathed by inhabitants of the earth, Mr. Edison had made provision by means of an abundance of glass protected openings, to permit the inmates of the electrical ships to survey their surroundings without quitting the interior. It was possible by properly selecting the rate of undulation to pass the vibratory impulse from the disintegrators through the glass windows of a car without damage to the glass itself. The windows were so arranged that the disintegrators could sweep around the car in every direction.

To overcome the destructive forces employed by the Martians no satisfactory plan had yet been devised, because there was no means to experiment with them. The production of those forces was still the secret of our enemies. But Mr. Edison had no doubt that if we could not resist their effects we might at least be able to avoid them by the rapidity of our motions. As he pointed out, the war machines which the Martians had employed in their invasion of the earth were really very awkward and unmanageable affairs. Mr. Edison's electrical ships, on the other hand, were marvels of speed and of manageability. They could dart about, turn, reverse their course, rise, fall with the quickness and ease of a fish in the water. Mr. Edison calculated that even if mysterious bolts should fall upon our ships we could diminish their power to cause injury by our rapid evolutions.

We might be deceived in our expectations and might have overestimated our powers, but at any rate we must take our chances and try.

A multitude exceeding even that which had assembled during the great congress at Washington now thronged New York and its neighborhood to witness the mustering and the departure of the ships bound for Mars. Nothing further had been heard of the mysterious phenomenon reported from the observatories six months before and which at the time was believed to indicate the departure of another expedition from Mars for the invasion of the earth. If the Martians had set out to attack us, they had evidently gone astray, or perhaps it was some other world that they were aiming at this time.

The expedition had, of course, profoundly stirred the interest of the scientific world, and representatives of every branch of science from all the civilized nations urged their claims to places in the ships. Mr. Edison was compelled, from lack of room, to refuse transportation to more than one in a thousand of those who now, on the plea that they might be able to bring back something of advantage to science, wished to embark for Mars.

On the model of the celebrated corps of literary and scientific men which Napoleon carried with him in his invasion of Egypt, Mr. Edison selected a company of the foremost astronomers, archaeologists, anthropologists, botanists, bacteriologists, chemists, physicists, mathematicians, mechanicians, meteorologists and experts in mining, metallurgy and every other branch of practical science, as well as artists and photographers. It was but reasonable to believe that in another world, and a world so much older than the earth as Mars was, these men would be able to gather materials in comparison with which the discoveries made among the ruins of ancient empires in Egypt and Babylonia would be insignificant indeed.

It was a wonderful undertaking and a strange spectacle. There was a feeling of uncertainty which awed the vast multitude whose eyes were upturned to the ships. The expedition was not large, considering the gigantic character of the undertaking. Each of the electrical ships carried about 20 men, together with an abundant supply of compressed provisions, compressed air, scientific apparatus and so on. In all, there were about 2,000 men, who were going to conquer, if they could, another world!

But though few in numbers they represented the flower of the earth, the culmination of the genius of the planet. The greatest leaders in science, both theoretical and practical, were there. It was the evolution of the earth against the evolution of Mars. It was a planet in the heyday of its strength matched against an aged and decrepit world, which nevertheless in consequence of its long ages of existence had acquired an experience which made it a most dangerous foe. On both sides there was desperation. The earth was desperate because it foresaw destruction unless it could first destroy its enemy. Mars was desperate because nature was gradually depriving it of the means of supporting life, and its teeming population was compelled to swarm like the inmates of an overcrowded hive of bees and find new homes elsewhere. In this respect the situation on Mars, as we were well aware, resembled what had already been known upon the earth, where the older nations overflowing with population had sought new lands in which to settle, and for that purpose had driven out the native inhabitants whenever those natives had proved unable to resist the invasion.

No man could foresee the issue of what we were about to undertake, but the tremendous powers which the disintegrators had exhibited and the marvelous efficiency of the electrical ships bred almost universal confidence that we should be successful.

The car in which Mr. Edison traveled was, of course, the flagship of the squadron, and I had the good fortune to be included among its inmates. Here, besides several leading men of science from our own country, were Lord Kelvin, Lord Rayleigh, Professor Roentgen, Dr. Moissan—the man who first made artificial diamonds—and several others whose fame had encircled the world. Each of these men cherished hopes of wonderful discoveries along his line of investigation to be made in Mars.

An elaborate system of signals had, of course, to be devised for the control of the squadron. These signals consisted of brilliant electric lights displayed at night and so controlled that by their means long sentences and directions could be easily and quickly transmitted.

The day signals consisted partly of brightly colored pennants and flags, which were to serve only when, shadowed by clouds or other obstructions, the full sunlight should not fall upon the ships. This could naturally only occur near the surface of the earth or of another planet.

Once out of the shadow of the earth we should have no more clouds and no more night until we arrived at Mars. In open space the sun would be continually shining. It would be perpetual day for us, except as, by artificial means, we furnished ourselves with darkness for the purpose of promoting sleep. In this region of perpetual day, then, the signals were also to be transmitted by flashes of light from mirrors reflecting the rays of the sun.

Yet this perpetual day would be also, in one sense, a perpetual night. There would be no more blue sky for us, because without an atmosphere the sunlight could not be diffused. Objects would be illuminated only on the side toward the sun. Anything that screened off the direct rays of sunlight would produce absolute darkness behind it. There would be no gradation of shadow. The sky would be as black as ink on all sides.

While it was the intention to remain as much as possible within the cars, yet since it was probable that necessity would arise for occasionally quitting the interior of the electrical ships Mr. Edison had provided for this emergency by inventing an airtight dress constructed somewhat after the manner of a diver's suit, but of much lighter material. Each ship was provided with several of these suits, by wearing which one could venture outside the car even when it was beyond the atmosphere of the earth.

Provision had been made to meet the terrific cold which we knew would be encountered the moment we had passed beyond the atmosphere—that awful absolute zero which men had measured by anticipation, but never yet experienced—by a simple system of producing within the airtight suits a temperature sufficiently elevated to counteract the effects of the frigidity without. By means of long, flexible tubes air could be continually supplied to the wearers of the suits, and by an ingenious contrivance a store of compressed air sufficient to last for several hours was provided for each suit, so that in case of necessity the wearer could throw off the tubes connecting him with the air tanks in the car. Another object which had been kept in view in the preparation of these suits was the possible exploration of an airless planet, such as the moon.

The necessity of some contrivance by means of which we should be enabled to converse with one another when on the outside of the cars in open space, or when in an airless world, like the moon, where there would be no medium by which the waves of sound could be conveyed as they are in the atmosphere of the earth, had been foreseen by our great inventor, and he had not found it difficult to contrive suitable devices for meeting the emergency.

Inside the headpiece of each of the electrical suits was the mouthpiece of a telephone. This was connected with a wire which, when not in use, could be conveniently coiled upon the arm of the wearer. Near the ears, similarly connected with wires, were telephonic receivers.

When two persons wearing the airtight dresses wished to converse with one another, it was only necessary for them to connect themselves by the wires and conversation could then be easily carried on.

Careful calculations of the precise distance of Mars from the earth at the time when the expedition was to start had been made by a large number of experts in mathematical astronomy. But it was not Mr. Edison's intention to go direct to Mars. With the exception of the first electrical ship, which he had completed, none had yet been tried in a long voyage. It was desirable that the qualities of each of the ships should be carefully tested, and for this reason the leader of the expedition determined that the moon should be the first port of space at which the squadron would call.

It chanced that the moon was so situated at this time as to be nearly in a line between the earth and Mars, which latter was in opposition to the sun and consequently as favorably situated as possible for the purposes of the voyage. What would be, then, for 99 out of the 100 ships of the squadron a trial trip would at the same time be a step of a quarter of a million miles gained in the direction of our journey, and so no time would be wasted.

The departure from the earth was arranged to occur precisely at midnight. The moon near the full was hanging high overhead, and a marvelous spectacle was presented to the eyes of those below as the great squadron of floating ships, with their signal lights ablaze, cast loose and began slowly to move away on their adventurous and unprecedented expedition into the great unknown. A tremendous cheer, billowing up from the throats of millions of excited men and women, seemed to rend the curtain of the night and made the airships tremble with the atmospheric vibrations that were set in motion.

Instantly magnificent fireworks were displayed in honor of our departure. Rockets by hundreds of thousands shot heavenward and then burst in constellations of fiery drops. The sudden illumination thus produced, overspreading hundreds of square miles of the surface of the earth with a light almost like that of day, must certainly have been visible to the inhabitants of Mars if they were watching us at the time. They might or might not correctly interpret its significance, but at any rate we did not care. We were off and were confident that we could meet our enemy on his own ground before he could attack us again.

And now as we slowly rose higher a marvelous scene was disclosed. At first the earth beneath us, buried as it was in night, resembled the hollow of a vast cup of ebony blackness, in the center of which, like the molten lava run together at the bottom of a volcanic crater, shone the light of the illuminations around New York. But when we got beyond the atmosphere and the earth still continued to recede below us its aspect changed. The cup shaped appearance was gone, and it began to round out beneath our eyes in the form of a vast globe—an enormous ball mysteriously suspended under us glimmering over most of its surface with the faint illumination of the moon and showing toward its eastern edge the oncoming light of the rising sun.

When we were still farther away, having slightly varied our course so that the sun was once more entirely

On their adventurous and unprecedented expedition.

hidden behind the center of the earth, we saw its atmosphere completely illuminated all around it with prismatic lights, like a gigantic rainbow in the form of a ring.

Another shift in our course rapidly carried us out of the shadow of the earth and into the all pervading sunshine. Then the great planet beneath us hung unspeakable in its beauty. The outlines of several of the continents were clearly discernible on its surface, streaked and spotted with delicate shades of varying color, and the sunlight flashed and glowed in long lanes across the convex surface of the oceans. Parallel with the equator and along the regions of the ever blowing trade winds were vast belts of clouds gorgeous with crimson and purple as the sunlight fell upon them. Immense expanses of snow and ice lay like a glittering garment upon both land and sea around the north pole.

As we gazed upon this magnificent spectacle our hearts bounded within us. This was our earth; this was the planet we were going to defend—our home in the trackless wilderness of space. And it seemed to us indeed a home for which we might gladly expend our last breath. A new determination to conquer or die sprung up in our hearts, and I saw Lord Kelvin, after gazing at the beauteous scene which the earth presented through his eyeglass, turn about and peer in the direction in which we knew that Mars lay with a sudden frown that caused the glass to lose its grip and fall dangling from its string upon his breast. Even Mr. Edison seemed moved.

"I am glad I thought of the disintegrator," he said. "I shouldn't like to see that world down there laid waste again."

"And it won't be," said Professor Sylvanus P. Thompson, gripping the handle of an electric machine; "not if we can help it."

To prevent accidents it had been arranged that the ships should keep a considerable distance apart. Some of them gradually drifted away until, on account of the neutral tint of their sides, they were swallowed up in the abyss of space. Still it was possible to know where every member of the squadron was through the constant interchange of signals. These, as I have explained, were effected by means of mirrors flashing back the light of the sun.

But, although it was now unceasing day for us, yet, there being no atmosphere to diffuse the sun's light, the stars were visible to us just as at night upon the earth, and they shone with extraordinary splendor against the intense black background of the firmament. The lights of some of the more distant ships of our squadron were not brighter than the stars in whose neighborhood they seemed to be. In some cases it was only possible to distinguish between the light of a ship and that of a star by the fact that the former was continually flashing while the star was steady in its radiance.

The most uncanny effect was produced by the absence of atmosphere around us. Inside the car, where there was air, the sunlight, streaming through one or more of the windows, was diffused and produced ordinary daylight.

But when we ventured outside we could only see things by halves. The side of the car that the sun's rays touched was visible; the other side was invisible, the light from the stars not making it bright enough to affect the eye in contrast with the sun illumined half.

As I held up my arm before my eyes, half of it seemed to have been shaved off lengthwise; a companion on the deck of the ship looked like half a man. So the other electrical ships near us appeared as half ships, only the illuminated sides being visible.

We had now got so far away that the earth had taken on the appearance of a heavenly body like the moon. Its colors had become all blended into a golden reddish hue, which overspread nearly its entire surface, except at the poles, where there were broad patches of white, it was marvelous to look at this huge orb behind us, while far beyond it shone the blazing sun like an enormous star in the blackest of nights. In the opposite direction appeared the silver orb of the moon, and scattered all around were millions of brilliant stars, amid which, like fireflies, flashed and sparkled the signal lights of the squadron.

CHAPTER VI.

A danger that might easily have been anticipated, that perhaps had been anticipated, but against which it would have been difficult, if not impossible, to provide, presently manifested itself.

Looking out of a window toward the right, I suddenly noticed the lights of a distant ship darting about in a curious curve. Instantly afterward another member of the squadron, nearer by, behaved in the same inexplicable manner. Then two or three of the floating cars seemed to be violently drawn from their courses and hurried rapidly in the direction of the flagship. Immediately I perceived a small object, luridly flaming, which seemed to move with immense speed in our direction.

The truth instantly flashed upon my mind, and I shouted to the other occupants of the car:

"A meteor!"

Such indeed it was. We had met this mysterious wanderer in space at a moment when we were moving in a direction at right angles to the path it was pursuing around the sun. Small as it was—and its diameter probably did not exceed a single foot—it was yet an independent little world, and as such a member of the solar system. Its distance from the sun being so near that of the earth, I knew that its velocity, assuming it to be traveling in a nearly circular orbit, must be about 18 miles in a second. With this velocity, then, it plunged like a projectile shot by some mysterious enemy in space directly through our squadron. It had come and was gone before one could utter a sentence of three words. Its appearance and the effect which it had produced upon the ships in whose neighborhood it passed indicated that it bore an intense and tremendous charge of electricity. How it had become thus charged I cannot pretend to say. I simply record the fact. And this charge, it was evident, was opposite in polarity to that which the ships of the squadron bore. It therefore exerted an attractive influence upon them, and thus drew them after it.

I had just time to think how lucky it was that the meteor did not strike any of us when, glancing at a ship just ahead, I perceived that an accident had occurred. The ship swayed violently from its course, dazzling flashes played around it, and two or three of the men forming its crew appeared for an instant on its exterior, wildly gesticulating, but almost instantly falling prone.

It was evident at a glance that the car had been struck by the meteor. How serious the damage might be we could not instantly determine. The course of our ship was immediately altered, the electric polarity was changed, and we rapidly approached the disabled car.

The men who had fallen lay upon its surface. One of the heavy circular glasses covering a window had been smashed to atoms. Through this the meteor had passed, killing two or three men who stood in its course. Then it had crashed through the opposite side of the car, and, passing on, disappeared into space. The store of air contained in the car had immediately rushed out through the openings, and when two or three of us, having donned our airtight suits as quickly as possible, entered the wrecked car we found all of its inmates stretched upon the floor in a condition of asphyxiation. They, as well as those who lay upon the exterior, were immediately removed to the flagship, restoratives were applied, and, fortunately, our aid had come so promptly that the lives of all of them were saved. But life had fled from the mangled bodies of those who had stood directly in the path of the fearful projectile.

This strange accident had been witnessed by several of the members of the fleet, and they quickly drew together in order to inquire for the particulars. As the flagship was now overcrowded by the addition of so many men to its crew, Mr. Edison had them distributed among the other cars. Fortunately it happened that the disintegrators contained in the wrecked car were not injured. Mr. Edison thought that it would be possible to repair the car itself, and for that purpose he had it attached to the flagship in order that it might be carried on as far as the moon. The bodies of the dead were transported with it, as it was determined, instead of committing them to the fearful deep of space, where they would have wandered forever, or else have fallen like meteors upon the earth, to give them interment in the lunar soil.

As we now rapidly approached the moon the change which the appearance of its surface underwent was no less wonderful than that which the surface of the earth had presented in the reverse order while we were receding from it. From a pale silver orb, shining with comparative faintness among the stars, it slowly assumed the appearance of a vast mountainous desert. As we drew nearer its colors became more pronounced, the great flat regions appeared darker, the mountain peaks shone more brilliantly. The huge chasms seemed bottomless and blacker than midnight. Gradually separate mountains appeared. What seemed like expanses of snow and immense glaciers streaming down their sides sparkled with great brilliancy in the perpendicular rays of the sun. Our motion had now assumed the aspect of falling. We seemed to be dropping from an immeasurable height and with an inconceivable velocity straight down upon those giant peaks.

Here and there curious lights glowed upon the mysterious surface of the moon. Where the edge of the moon cut the sky behind it it was broken and jagged with mountain masses. Vast crater rings overspread its surface, and in some of these I imagined I could perceive a lurid illumination coming out of their deepest cavities and the curling of mephitic vapors around their terrible jaws.

We were approaching that part of the moon which is known to astronomers as the bay of Rainbows. Here a huge semicircular region, as smooth almost as the surface of a prairie, lay beneath our eyes, stretching southward into a vast oceanlike expanse, while on the north it was inclosed by an enormous range of mountain cliffs, rising perpendicularly to a height of many thousand feet and rent and gashed in every direction by forces which seemed at some remote period to have labored at tearing this little world in pieces.

It was a fearful spectacle—a dead and mangled world too dreadful to look upon. The idea of the death of the moon was, of course, not a new one to many of us. We had long been aware that the earth's satellite was a body which had passed beyond the stage of life, if indeed it had ever been a life supporting globe; but none of us was prepared for the terrible spectacle which now smote our eyes.

At each end of the semicircular ridge that incloses the bay of Rainbows there is a lofty promontory. That at the northwestern extremity had long been known to astronomers under the name of Cape Laplace. The other promontory, at the southeastern termination, is called Cape Heraclides. It was toward the latter that we were approaching, and by interchange of signals all the members of the squadron had been informed that Cape Heraclides was to be our rendezvous upon the moon.

I may say that I had been somewhat familiar with the scenery of this part of the lunar world, for I had often studied it from the earth with a telescope, and I had thought that if there was any part of the moon where one might with fair expectation of success look for inhabitants, or if not for inhabitants at least for relics of life no longer existent there, this would surely be the place. It was, therefore, with no small degree of curiosity, notwithstanding the unexpectedly frightful and repulsive appearance that the surface of the moon presented, that I now saw myself rapidly approaching the region concerning whose secrets my imagination had so often busied itself. When Mr. Edison and I had paid our previous visit to the moon on the first experimental trip of the electrical ship, we had landed at a point on its surface remote from this, and, as I have before explained, we then made no effort to investigate its secrets. But now it was to be different, and we were at length to see something of the wonders of the moon.

I had often on the earth drawn a smile from my friends by showing them Cape Heraclides with a telescope and calling their attention to the fact that the outline of the peak terminating the cape was such as to present a remarkable resemblance to a human face, unmistakably a feminine countenance, seen in profile and possessing no small degree of beauty. To my astonishment this curious human semblance still remained when we had approached so close to the moon that the mountains forming the cape filled nearly the whole field of view of the window from which I was watching it. The resemblance indeed was most startling.

"Can this indeed be Diana herself?" I said half aloud, but instantly afterward I was laughing at my fancy, for Mr. Edison had overheard me and exclaimed, "Where is she?"

"Who?"

"Diana."

"Why, there," I said, pointing to the moon. But, lo, the appearance was gone even while I spoke. A swift change had taken place in the line of sight by which we were viewing it, and the likeness had disappeared in consequence.

A few moments later my astonishment was revived, but the cause this time was a very different one. We had

The car had been struck by a meteor.

been dropping rapidly toward the mountains, and the electrician in charge of the car was swiftly and constantly changing his potential, and, like a pilot who feels his way into an unknown harbor, endeavoring to approach the moon in such a manner that no hidden peril should surprise us. As we thus approached I suddenly perceived crowning the very apex of the lofty peak near the termination of the cape the ruins of what appeared to be an ancient watch tower. It was evidently composed of cyclopean blocks larger than any that I had ever seen even among the ruins of Greece, Egypt and Asia Minor.

Here, then, was visible proof that the moon had been inhabited, although probably it was not inhabited now. I cannot describe the exultant feeling which took possession of me at this discovery. It settled so much that learned men had been disputing about for centuries.

"What will they say," I exclaimed, "when I show them a photograph of that?"

Below the peak, stretching far to right and left, lay a barren beach which had evidently once been washed by sea waves, because it was marked by long curved ridges such as the advancing and retiring tide leaves upon the shore of the ocean.

This beach sloped rapidly outward and downward toward a profound abyss, which had once evidently been the bed of a sea, but which now appeared to us simply as the empty, yawning shell of an ocean that had long vanished.

It was with no small difficulty, and only after the expenditure of considerable time, that all the floating ships of the squadron were gradually brought to rest on this lone mountain top of the moon. In accordance with my request, Mr. Edison had the flagship moored in the interior of the great ruined watch tower that I have described. The other ships rested upon the slope of the mountain around us.

Although time pressed, for we knew that the safety of the earth depended upon our promptness in attacking Mars, yet it was determined to remain here at least two or three days in order that the wrecked car might be repaired. It was found also that the passage of the highly electrified meteor had disarranged the electrical machinery in some of the other cars, so that there were many repairs to be made besides those needed to restore the wreck.

Moreover, we must bury our unfortunate companions who had been killed by the meteor. This, in fact, was the first work that we performed. Strange was the sight and stranger our feelings as here on the surface of a world distant from the earth and on soil which had never before been pressed by the foot of man we performed that last ceremony of respect which mortals pay to mortality. In the ancient beach at the foot of the peak we made a deep opening, and there covered forever the faces of our friends, leaving them to sleep among the ruins of empires and among the graves of races which had vanished probably ages before Adam and Eve appeared in paradise.

While the repairs were being made several scientific expeditions were sent out in various directions across the moon. One went westward to investigate the great ring plain of Plato and the lunar Alps. Another crossed the ancient sea of Showers toward the lunar Apennines.

One started to explore the immense crater of Copernicus, which, yawning 50 miles across, presents a wonderful appearance even from the distance of the earth. The ship in which I, myself, had the good fortune to embark was bound for the mysterious lunar mountain Aristarchus.

Before these expeditions started a careful exploration had been made in the neighborhood of Cape Heraclides. But, except that the broken walls of the watch tower on the peak, composed of blocks of enormous size, had evidently been the work of creatures endowed with human intelligence, no remains were found indicating the former presence of inhabitants upon this part of the moon.

CHAPTER VII.

But along the shore of the old sea, just where the so called bay of Rainbows separates itself from the abyss of the sea of Showers, there were found some stratified rocks in which the fascinated eyes of the explorer beheld the clear imprint of a gigantic human foot, measuring five feet in length from toe to heel.

The most minute search failed to reveal another trace of the presence of the ancient giant, who had left the impress of his foot in the wet sands of the beach here so many millions of years ago that even the imagination of the geologists shrank from the task of attempting to fix the precise period.

Around this gigantic footprint gathered most of the scientific members of the expedition, wearing their oddly shaped airtight suits, connected with telephonic wires, and the spectacle, but for the impressiveness of the discovery, would have been laughable in the extreme. Bending over the mark in the rock, nodding their heads together, pointing with their awkwardly accoutered arms, they looked like an assemblage of antediluvian monsters collected around their prey. Their disappointment over the fact that no other marks of anything resembling human habitation could be discovered was very great.

Still this footprint in itself was quite sufficient, as they all declared, to settle the question of the former inhabitation of the moon, and it would serve for the production of many a learned volume after their return to the earth, even if no further discoveries should be made in other parts of the lunar world.

It was the hope of making such other discoveries that led to the dispatch of the various expeditions I have already named. I had chosen to accompany the car that was going to Aristarchus, because, as every one who had viewed the moon from the earth was aware, there was something very mysterious about that mountain. I knew that it was a crater nearly 30 miles in diameter and very deep, although its floor was plainly visible.

What rendered it remarkable was the fact that that floor and the walls of the crater, particularly on the inner side, glowed with a marvelous brightness which rendered them almost blinding when viewed with a powerful telescope.

So bright were they, indeed, that the eye was unable to see many of the details which the telescope would have made visible but for the flood of light which poured from the mountains. Sir William Herschel had been so completely misled by this appearance that he supposed he was watching a lunar volcano in eruption.

It had always been a difficult question what caused the extraordinary luminosity of Aristarchus. No end of hypotheses had been invented to account for it. Now I was to assist in settling these questions forever.

From Cape Heraclides to Aristarchus the distance in an air line was something over 300 miles. Our course lay across the northeastern part of the sea of Showers, with enormous cliffs, mountain masses and peaks shining on the right, while in the other direction the view was bounded by the distant range of the lunar Apennines, some of whose towering peaks, when viewed from our immense elevation, appeared as sharp as the Swiss Matterhorn.

When we had arrived within about 100 miles of our destination, we found ourselves floating directly over the so called Harbinger mountains. The serrated peaks of Aristarchus then appeared ahead of us, fairly blazing in the sunshine.

It seemed as if a gigantic string of diamonds, every one as great as a mountain peak, had been cast down upon the barren surface of the moon and left to waste their brilliance upon the desert air of this abandoned world.

As we rapidly approached the dazzling splendor of the mountain became almost unbearable to our eyes, and we were compelled to resort to the device practiced by all climbers of lofty mountains, where the glare of sunlight upon snow surfaces is liable to cause temporary blindness, of protecting our eyes with neutral tinted glasses.

Professor Moissan, the great French chemist and maker of artificial diamonds, fairly danced with delight.

"Voila, voila, voila!" was all that he could say.

When we were comparatively near the mountain no longer seemed to glow with a uniform radiance, evenly distributed over its entire surface, but now innumerable points of light, all as bright as so many little suns, blazed away at us. It was evident that we had before us a mountain composed of, or at least