

# EDISON'S CONQUEST OF MARS

By Garrett P. Serviss

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## CHAPTER XIII.

In the meantime some of the skulkers whose flight I have referred to began to return, chafed, 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 the diabolical monsters from a malignant 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 have been expected to bear.

Those who, as already described, had run with precipitous haste into space, rising in elliptical orbits from the surface of the planet, described great curves in the sky, and their little bodies filled with burning oil, so filled with put out, that they almost forgot the error which had inspired it.

There was nothing surprising in what had occurred to them the moment they 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 las-

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 upward, rising to a height of 400 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 gradual 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 electric 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 unmeditated 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 that 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 various directions and with every degree of velocity. A little calculation had shown that an initial velocity of 30 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 30 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 from the attraction of the asteroid and to pass on to an infinite distance in any direction was only about 42 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 42 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 if 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.

"All aboard!" was the signal, and the squadron having assembled under the lead of the flagship, we started again for Mars.

This time, as it proved, there was to be no further interruption, and when next we paused it was in the presence of the world inhabited by our enemies and facing their frowning batteries.

We did not find it so easy to start from the asteroid as it had been to start from the earth—that is to say, we could not so readily generate a very high velocity.

In consequence of the comparatively small size of the asteroid its electric influence was very much less than that of the earth, and notwithstanding the appliances which we possessed for intensifying the electrical effect it was not possible to produce a sufficient repulsion to start us off for Mars with anything like the impulse which we had received from the earth on our original departure.

The utmost velocity that we could generate did not exceed three miles in a second, and to get this required our utmost efforts. In fact, it had not seemed possible that we should attain even so great a speed as that. It was far more than we could have expected, and even Mr. Edison was surprised as well as greatly gratified when he found that we were moving with the velocity that I have named.

We were still about 6,000,000 miles from Mars, so that, traveling three miles in a second, we should require at least 23 days to reach the immediate neighborhood of the planet.

Meanwhile we had plenty of occupation to make the time pass quickly. Our prisoner was transported along with us, and we now began our attempts to ascertain what his language was, and if possible to master it ourselves.

Before quitting the asteroid we had found that it was necessary for him to swallow one of his "air pills," as Professor Moissan called them, at least three times in the course of every 24 hours. One of us supplied him regularly, and I thought I could detect evidences of a certain degree of gratitude in his expression. This was encouraging, because it gave additional promise of the possibility of our being able to communicate with him in some more effective way than by mere signs. But once inside the car, where we had a supply of air kept at the ordinary pressure experienced on the earth, he could breathe like the rest of us.

The best linguists in the expedition, as Mr. Edison had suggested, were now assembled in the flagship, where the prisoner was, and they set to work to devise some means of ascertaining the manner in which he was accustomed to

express his thoughts. We had not heard him speak, because until we carried him into our car there was no atmosphere capable of conveying any sounds he might attempt to utter.

It seemed a fair assumption that the language of the Martians would be scientific in its structure. We had so much evidence of the practical bent of their minds and of the immense progress which they had made in the direction of the scientific conquest of nature that it was not to be supposed their medium of communication with one another would be lacking in clearness, or would possess any of the puzzling and unnecessary ambiguities that characterized the languages spoken on the earth.

"We shall not find them making hesitations of stones, sticks and other inanimate objects," said one of the American linguists. "They must certainly have got rid of all that nonsense long ago."

"Ah," said a French professor from the Sorbonne, one of the makers of the never-to-be-finished dictionary, "it will be like the language of my country, transparent, similar to the diamond and sparkling as is the fountain."

"I think," said a German enthusiast, "that it will be a universal language, the Volapuk of Mars, spoken by all the inhabitants of that planet."

"But all these speculations," broke in Mr. Edison, "do not help you much. Why not begin in a practical manner by finding out what the Martian calls himself, for instance?"

This seemed a good suggestion, and accordingly several of the bystanders began an expressive pantomime, intended to indicate to the giant, who was following all their motions with his eyes, that they wished to know by what name he called himself. Pointing their fingers to their own breasts, they repeated, one after the other, the word "man."

If our prisoner had been a stupid savage, of course any such attempt as this to make him understand would have been idle. But it must be remembered that we were dealing with a personage who had presumably inherited from hundreds of generations the results of a civilization and an intellectual advance measured by the constant progress of millions of years.

Accordingly we were not very much astonished when, after a few repetitions of the experiment, the Martian—one of whose arms had been partially released from its bonds in order to give him a little freedom of motion—imitated the action of his interrogators by pressing his finger over his heart.

### [TO BE CONTINUED.]

**Crowing Matches.**  
The Belgian artisan spends his leisure in a very curious manner. He keeps a special cock for crowing, and the bird which can outcrow his fellows has reached the highest pinnacle of perfection. The mode of operation is to place the cages containing the roosters in long rows, for it appears that one bird sets the other off crowing. A marker appointed by the organizers of the show is told off for each bird, his duty being to note carefully the number of crows for which it is responsible in the same fashion as the laps are recorded in a bicycle race. The customary duration of the match is one hour, the winner being the bird which scores the highest number of crows in the allotted time. A great number of these competitions have taken place in the Liege district, and in some cases heavy bets have been made on the result.

**Radishes.**  
Radishes originated in China, where they have been cultivated for many centuries and sometimes grow as big as a man's head. In Germany the old-fashioned country mothers cure hoarseness and cough with radish juice mixed with sugar candy. The radishes of today have no flavor, no character. Formerly their sharp, biting taste made them palatable.

**A Jury Room Gem.**  
A gem from the records of a Missouri court, given in an address by Hon. William H. Wallace, is the following lucid verdict in a lunacy case: "We, the jury, impaneled, sworn and charged to inquire into the insanguinity of Hezekiah Jones, do occur in the affirmative."

**Two Bad Bites.**  
Diogenes, being asked, "What is that beast which is the most dangerous?" replied, "Of wild beasts the bite of a slanderer and of tame beasts that of the fatterer."

If the average man could read the story of his life he wouldn't believe it.—Chicago News.

**An Impudent Question.**  
The Home Magazine recalls a good story which Dr. Newman Hall used to tell on the lecture platform. An illiterate negro preacher said to his congregation: "My brethren, when de fust man Adam wds made he was made ob wet clay and set up ag'in de palings to dry."

"Do you say," said one of the congregation, "dat Adam was made ob wet clay an set up ag'in de palings to dry?"

"Yes, sar; I do."

"Who made the palings?"

"Sit down, sar," said the preacher sternly; "such questions as dat would upset any system ob theology."

**Majuba Hill.**  
Here's the story of Majuba Hill in a nutshell: Sir George Colley had between 600 and 700 men; the Boers numbered about 150 men, under General Smits. The British camped in a natural bowl at the top of the hill, and set no sentries; the Boers clambered up the hill by night and attacked in the early morning, taking the British completely by surprise.

## THE STORY.

Cold blows the gale from the north;  
Wild moans the forest, vast and roar;  
Fierce spirits wander boldly forth,  
Grim monsters scream at every door.  
Against the tempest's hurle might  
God keep the helpless poor tonight.

Cold creep the waves along the shore;  
Wild about the breakers in their glee;  
Fierce swells the voice of ocean roar,  
Grim stalk the shades along the sea.  
Against the storm's tempestuous might  
God guard the sea-tossed ship tonight.

Cold mists are turned to rattling hail;  
Wild voices call in every part;  
Fierce forms resist the blowing gale;  
Grim faces toward the sea thrust.  
Oh, God, against the ocean's might  
Protect the staggering ship tonight!

Ah, cold the sea's embrace of chill  
The winds that wildly howl and stir,  
As wrecks are tossed and fogs now fill  
To spar and mainstay sadling.  
Ah, yes, for aye, from tempest might  
Thine own are safely housed tonight.  
—Emily A. Warden in Philadelphia Ledger.

## JOAN'S EXPERIENCE

How Her Sister Was Caught  
In the Trap She Had Laid  
For Joan.

"Ruth, Ruth, it's important; I want you"—from the farther side of my door.

I had resolved to devote the morning to study, but, nothing being on the continent, I felt a certain responsibility for my beautiful younger sister. The "important" decided me.

"What is it?" I asked as she entered the room.

"You'll never guess. Lord Avonmouth has proposed."

"But you haven't accepted him?" I asked, fearful that inexperienced Joan should trust her life to the man with the worst reputation in the country.

"Why not?"

"You don't know anything about him."

"Don't I? He's the most charming man I ever met, and I certainly said 'yes.'"

"What will mother say?" I asked, as Joan, not at all discomfited at my cool reception of her news left my room, humming the refrain of a song.

Perplexed with the situation that had suddenly arisen, I went down stairs to find our old friend and neighbor, Jack Villiers, of whose presence the exigencies of the diplomatic service, to which he belonged, would soon deprive us. I told him of my troubles, and ended by asking his advice.

Ten minutes later he said:

"This is my idea: Joan is impressionable, I have an old friend in town who has a rare knack of fascinating girls. I'll get him down for a week's shoot. If he devotes his time to Joan it may destroy her inclination for Avonmouth."

The plan seemed feasible. I prayed that Joan's affections would be diverted from their objectionable object.

Two days later I received a note from Jack saying that his friend had accepted the invitation and was coming today.

When I descended about luncheon time Jack and his friend were the only occupants of the drawing room.

"Let me introduce you to my old friend, Claude Blackwood," said Jack.

I gave my hand mechanically. My thoughts were concerned with Joan's future.

Later I noticed that he had fine eyes and there was plenty of him, but all the same I was disappointed. Perhaps I expected too much.

Soon Lord Avonmouth and Joan strolled in from the garden, and after the usual compliments, we went in to luncheon. Before half an hour had passed I discovered that Captain Blackwood fascinated me and to such an extent that I almost forgot my fears with regard to Joan. She, too, seemed interested. Her white muslin dress, decorated with a red rose at her waist, showed off to advantage her rich young beauty.

After lunch, while Joan and I awaited the men in the rose garden, I was strangely silent. I had only thought for Jack's friend.

When the men had been with us some few minutes Jack maneuvered so that Captain Blackwood and Joan strolled off to inspect some ruins at the farther end of the park.

"Well contrived," whispered Jack as they disappeared from our sight.

"Well contrived," I echoed absently.

The next morning we assembled for a ride previously arranged. Jack again managed that Captain Blackwood accompanied Joan.

Though the knowledge that he left my side reluctantly gave me intense secret pleasure, I found myself surrendering to a desire for isolation, and soon I was alone with the softly whispering trees. Their sadness had never seemed so attuned to my mood before.

Horse's hoof, a beating of my heart, and Jack's friend drew rein beside me. The whispering of the trees was so beautiful I wondered I had not noticed it before.

He did not speak. I summoned courage to glance at his face—only for a moment.

"I think we had better find the others," I said. "I want to speak to Jack."

"Have I offended you?"

He never knew the effort it cost me to curb his ardor when he reminded me of my self-imposed duty to Joan.

Ten minutes later Jack was beside me.

"Blackwood said you wanted me."

"I want him to give all his time to Joan. Have you forgotten our compact?"

He was so confused that I said to him, "What's the matter?" Then, as he did not answer, "Surely you can tell me," I said.

"I love Joan, I have always loved her, and you know it's hopeless, hopeless, hopeless."

I did not contradict him.

A week passed, and Captain Blackwood, happily, was still among us. Our scheme, as far as Joan was concerned, had answered admirably. She had been so distant to Lord Avonmouth that he had betaken himself to Paris. But I had saved Joan by compromising my life's happiness. I loved Captain Blackwood, and I feared with a great fear the day on which he would take his imminent departure.

While he was near I could be almost happy. But I knew the blackness that would supervene when he had gone.

He stood before me. I could not look at him.

"Ruth!"

"Goodby!" I whispered.

"Not goodby," I never goodby."

"Why?" I timidly whispered.

"I love you, I love you." Then, after a pause, "Have you no word for me?"

Duty to Joan alone restrained me from throwing my arms about his neck.

"Have you no word for me?"

I could not speak. I only shook my head.

When I next had a consciousness of things he was gone. I cried a voice.

"Where's Ruth?" cried my eyes and it was Joan's. I dropped a smile.

Summoned the ghost of Jack's voice.

"Here she is!" cried Jack.

They entered together with us to the station? Captain Blackwood was in such a bad temper we did Joan.

"A good job, too," from Jack.

"Jack!" from Joan.

"It is, Joan and I are engaged. I should never have asked if you way—"

found ourselves alone on the way—

"What?" I gasped.

For answer Joan took Jack's hand in hers.

"What about Lord Avonmouth?" I asked when a few minutes later Joan and I were alone together.

"I hate him. I always loved him, and I knew he loved me, but I care wouldn't speak. I pretended to go for Lord Avonmouth as Jack was after, flying away, and—what is the matter, Ruth?"

I had no time and less inclination to explain. I seized a hat and hurried toward the station.

Half way there, I paused for breath. The warning whistle of a train seemed to stab my heart.

"Come back, come back, my love!" I cried.

For answer a cloud of smoke that told me of the departure of the man I loved. All the same I pressed on. Arrived at the station, I almost fell into the arms of the station master, who prided himself on the flowers that decorated his station.

"What's happened, miss?"

"I want a gentleman, but he's gone."

"There's a lunatic here, if that's his name, miss."

My attention was drawn to a knot of officials who were watching a tall, well built man, who was viciously striking the heads from the flowers with a walking cane.

"A lunatic!" I gasped.

"Well, miss, he drove for a certain train, but didn't go by it. Ever since he's been spilling my flowers, and he looked so savage none of us liked to interfere."

It was the man I loved.

At that moment the lunatic caught my eyes.

He approached.

"You!"

"Yes, dear."

Our eyes said all that was left unspoken.—Mainly About People.

**Spider Cures.**  
In China spiders are highly esteemed in the treatment of croup. You get from an old wall the webs of seven black spiders—two of which must have the owners sitting in the middle—and pound them up in a mortar with a little powdered alum. The resulting mixture must then be set on fire, and the ashes, when squirted into the throat of the patient, by means of a bamboo tube, are said to effect a certain and immediate cure.

Black spiders are evidently full of medicinal virtue, for they are largely employed in the treatment of ague as well. In Somersetshire, if one is afflicted with the unpleasant ailment, the way to get well is to shut up a large black spider in a box and leave it there till it dies. At the moment of its decease the ague should disappear. In Sussex the treatment is more heroic; the patient must swallow the spider.

Perhaps, after all, this remedy may not be so disagreeable as it appears, for a German lady who was in the habit of picking out spiders from their webs as she walked through the woods and eating them after first depriving them of their legs declared that they were very nice indeed and tasted like nuts.

**Settled the Duel.**  
Lord March (afterward the Marquis of Queensberry) was not accustomed to view a duel with unbecoming apprehension, and usually attended an affair with an air of enjoyment that often was decidedly displeasing and embarrassing to his adversary. But he was served at last with that sauce which the proverb explains is for the gander as well as for the goose. It was when he was challenged to fight an Irish sportsman.

Lord March appeared on the ground accompanied by a second, surgeon and other witnesses. His opponent arrived soon afterward with a similar retinue, but added to by a person who staggered under the weight of a polished oak coffin, which he deposited on the ground, end up, with its lid facing Lord March and his party.

Lord March became decidedly uncomfortable when he read the inscription plate, engraved with his own name and title and the date and year of death, and peace was patched up.



We rose to an immense height. Preparing 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 airtight suit, making tremendous jumps into 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.

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