

A TRIP TO MARS,
AS DESCRIBED BY AN EYE WITNESS

BY

CHARLES K. LANDIS

WITH AN INTRODUCTION BY
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Introduction

In between the time that Jules Verne launched his first rocket to the moon in 1865 and H. G. Wells sent the first men to the moon in 1901, another visionary named Charles K. Landis took his readers on *A Trip to Mars*. Unfortunately, unlike his contemporaries in the fledgling field of science fiction, Landis never saw his manuscript published. In fact, it apparently has never seen the light of day—until now.

The concept of flight has fascinated humanity for centuries. Today, many people are familiar with the fact that Leonardo Da Vinci studied flight in the fifteenth century. After we conquered the skies with the airplane and the zeppelin, we continued to turn our sight even higher, first to the moon, then to the planets beyond. By the mid-nineteenth century, the thought of flying deeper into space was a topic of serious discussion among the leading scientists of the day. Mr. Landis, an extremely intelligent and well-read individual, was undoubtedly familiar with some of the ideas being discussed in his day. Like Verne, it is apparent that he was influenced by popular theories and used some of those ideas for his novel. However, in Mr. Landis' case, there were other factors at work.

On the surface, this Philadelphia attorney might have seemed like an unlikely author for a subject such as science fiction. He had set up a law practice before his 21st birthday, and joined the prestigious Union League to mingle with other wealthy Pennsylvanians. But before too long, he was attracted to real estate investment. Like many others, Mr. Landis saw the advent of the railroads as a means to develop the heartland of South Jersey. He was responsible for developing the towns of Colville (later known as Elwood), Hammonton, Vineland and Sea Isle City.

A TRIP TO MARS

But while the world might have seen him as a prominent, successful, and somewhat ruthless businessman, Mr. Landis was—from his own personal accounts—a restless soul, plagued by domestic difficulties and too much imagination. Writing seems to have provided him with both an outlet for his ideas and an escape from his reality. His journals, which are part of the collections at the Vineland Historical and Antiquarian Society, tell the tale of a lonely man who often preferred to keep moving both mentally and physically rather than face his personal problems.

A Trip to Mars was, in some respects, the ultimate escape for Mr. Landis. Apparently written in 1876, the text was composed while he was still in mourning for his first-born son, Henry, who died in 1870 of typhoid fever at thirteen months of age. Landis would also have been recovering from his divorce from Clara Meade Landis, his wife of eight years, a wealthy young woman from a socially prominent family who had found it difficult to transfer from the bright lights of city life to the wilds of South Jersey. Although she successfully bore three more sons after Harry, she endured at least one miscarriage and years of emotional abuse that ultimately sent her home to her family.

At almost the same time that he was working on his novel, Mr. Landis had been tried for the murder of Uri Carruth, a local newspaper editor who had engaged in an ongoing campaign of harassment against the Landis family. Landis ultimately became one of the first people in America to be freed by a verdict of temporary insanity.

Mr. Landis spent much of his life traveling for both business and pleasure, but it seemed that the sights of Europe, Africa and the United States were not enough. The point finally arrived when he apparently decided it was time to leave the planet entirely. As any fiction writer knows, the opportunity to create

AS DESCRIBED BY AN EYE WITNESS

and control a world of your own is a temptation not easily resisted. Since his real world had slipped so dramatically out of his control, Mr. Landis undoubtedly found no small degree of comfort in the opportunity to create a new one.

The Vineland Historical and Antiquarian Society is grateful to Dr. Thomas Kinsella and the South Jersey Culture & History Center for giving us the chance to share this tale with the public for the first time. Anyone who has ever appreciated the work of Jules Verne and H. G. Wells will undoubtedly enjoy the opportunity to journey with Charles K. Landis on *A Trip to Mars*.

Patricia A. Martinelli, M.A.
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A Trip to Mars,

As Described by an Eye Witness

The following singular manuscript was picked up by a celebrated traveller, in the mountains of the Moon, in Central Africa. It was enclosed in a substantial tin box and appeared to be in a perfect state of preservation. How it could possibly have gotten into such an out of the way place, or who could have dropped so singular a document, we must leave to the conjecture or imagination of the reader.

As to any particulars of that wonderful order known as the Knights of the Rosy Cross or Rosicrucians, whose existence has been known now for some hundreds of years, the reader is referred to the veracious and learned works of Johann Valentin Andreae.

Wm. Klandis,
Vineland,
New Jersey.

Chapter I

The stars. These distant worlds; are they inhabited? This is the question that continually occurred to my mind. If they are inhabited, are they inhabited by beings such as ourselves; or are they intelligent beings of a different form? What kind of animals can they have? But above all, what kind of intelligent beings? The star Sirius is six millions of miles in diameter, eighteen millions in circumference. What idea can the inhabitants upon such a world have of distance? Unless they can bring to their aid the light of astronomy like ourselves, they must think that their world has neither beginning or end. Or is the size of its inhabitants proportionate to the extent of the world? In the midst of these thoughts I picked up a newspaper, the ubiquitous newspaper, and read a paper to the effect that the planet Mars is inhabitable, giving the plainest reasons why it must be inhabitable and, next, that it has three moons. And why should it not be inhabited, why should this vast number of worlds which we see before us in space be created for nothing—without some grand spiritualistic object like the Earth? If this is so, must there never be any communication from planet to planet, and from star to star? Since the discoveries of science, our Earth, our universe, and all its planets appear but as a small part of God's creation. With the naked eye we can see thousands of worlds in the dark blue firmament of heaven, glimmering like spirit lights, millions and billions of miles away. We can see the worlds so numerous that in one portion of the heavens they make a pathway across the firmament. Do the angels occupy them, or genii, or human beings like ourselves; and are our minds to be debarred from any communication with the intelligences in those distant worlds? I have lived to see the Earth girdled in less than forty minutes, as Puck said in *A Midsummer's Night Dream*, by the electric tele-

graph, and there must be some means of communication, if we only knew it. Perhaps even of going there, who can tell? I knew of one man in the world who might give me information upon the subject and only one. He was learned in all sciences, of all countries, and of all ages. He had lived no one knew how long. He belonged to that wonderful society—the Rosicrucians; who was he? This I could not tell. What was he? Of this I could form some idea. Some years ago I visited the Tyrol, the most beautiful, the most sublime, and the most enchanting part of Europe. The paradise of the world. Others have said that this paradise stretches from Salsburg to the Alps. When there I was in the habit of resorting to some of the wildest and most rocky portions of the mountains near the River Inn, and between Holl and Innsbruck. I would take my gun with me to hunt the chamois or other game, and at night would find shelter in the huts of a shepherd or shepherdess on top of the mountains. Nature was so free, the mountains so wide stretching, and the peasants so gentle and hospitable, that I loved this life.

The storms in these mountains were terrific, and I had a strange fancy to go out at night, when the thunder was loudest, to witness the storm among the mountains in all its sublimity. One night a storm gathered, of more than usual violence, and in order to find my way back I kept my course along the side of a small stream, when suddenly I heard a more than usual roar—like prolonged thunder—and then I lost consciousness before I had time to realize anything of what had happened.

When I came to my senses, I found myself in a large pleasant room furnished in the style of the Middle Ages. I looked around and saw the bright sunlight coming into long narrow windows, with small round glasses looking like silver. There was a great stone stove in the corner, covered with tiles represent-

ing some Scriptural pictures. The floors were of stone covered with rugs and the skins of animals in places. The chairs large and ornamental. The door slowly opened, and there stood a pretty peasant girl, a bright pleasant face and smile and golden hair, and dressed in a light velvet bodice and short blue petticoat. I looked at her when she made a sudden retreat. A minute after appeared a man apparently about fifty years of age, gray hair, blue eyes, florid complexion, tall slender form, and graceful movements. His countenance was benign and there was a placid serenity about it, more than natural. He said, "My son, be quiet; I will satisfy your curiosity about your surprising situation, without your speaking. I was out one night a month ago, making some electrical experiments during a thunder storm, when occurred a sudden rise of a stream owing to a shower of rain in the mountains. I took my stand upon a projecting crag, past which the torrents would have to come. As it came roaring down the mountain like thunder, I saw borne upon its surface, among the debris of trees and broken limbs, a human form; I ran down the surface of the crag and as the lightening revealed the torrent, I leaned over and grasped a mangled body, and bore it to this, my castle. I set your broken limbs myself, and treated your fever, and you are now convalescing. A few days of repose will be enough to restore you; but for the present I enjoin absolute quiet."

This was said in a calm, firm tone, which seemed impossible to disobey. I laid there in wonder, conjecturing upon past events. How long I had been there, and who the people were that I found myself among. I could see, by the windows and other surroundings, that I must be in some one of the old castles found in this country. My limbs were all bandaged in splinters, and I found them to be immovable. I felt no pain, not even unrest, but as though I had wakened from pleasant

dreams. I again sunk into unconsciousness, and when I next came to my senses, my limbs were free, and I felt renewed. I saw the same benignant face looking down upon me with a smile, and he said, "My son, you are saved, and will soon be restored. Your case is the most successful I have had in my life. You have recovered against every preconceived opinion in science, and your case has confirmed my previous conceptions of the power of certain mineral poisons, I have found in the silver mines of these mountains, to arrest the hand of death upon the exhaustion of certain vital fluids, until your system could restore them."

I was amazed at the coolness of these remarks, and it was a disagreeable reflection to me, that I had been a subject of experiments.

"What has been the extent of my injuries?" I replied.

"A fracture of the skull, both legs and arms broken in several places, and the ribs broken."

"I feel nothing of it," I replied, stretching out my arms and legs to their full length.

"You will feel nothing of it," replied the stranger. "Today you can sit upon a chair, and henceforward your recovery will be rapid. Michael," called the stranger.

Immediately appeared one of the peasants of the Tyrol, in bare legs and knee breeches. He was very gentle with me and lifted me up on a large chair which stood beside my bed, and then rolled me in front of one of the windows. I saw stretched before me a green valley, through which ran a river. At the borders of the valley were high and broken mountains. It had rained the night before, and thousands of cascades were falling down their rocky sides. Some of these mountains were crowned by old castles and at different places were to be seen old convents and monasteries. At the end of the valley was the city of

Innsbruck, with its sharp roofs, its towers and steeples, and beyond it high mountains covered with glaciers. It all looked to me like enchantment. I soon recognized the place where I happened to be as an old castle upon which I had frequently looked from the valley below.

To be brief, the proprietor of this castle whom I shall call Count Motzen, watched me through my convalescence like his own child and I soon felt for him the greatest degree of affection.

One day he said to me, "My son." This was the endearing term he always used. "You have afforded me an exquisite pleasure, that of saving your life and helping you. Why can you not abide with me in this castle, instead of returning to your far off country of America? Remain with me, and I can teach you many things which you can never otherwise learn. I am willing to enter you as an apprentice to the far-famed Order of the Rosicrucians, about which all men have heard and few, very few know. If you become a member of this Order you will in time be taught the profoundest secrets of nature. Not only how to transmute the baser metals into gold, but the more important secret of how to prolong life. There is no such thing as immortality on Earth, but it is possible to greatly prolong life, by natural causes, providing that you have the necessary knowledge of the secrets of nature. We know all sciences that are known in the world, and many that no others know; but we are sworn to keep them secret within our own Order."

"If these sciences are good, and useful, why keep them secret?"

"Because only the good and pure should use them, and then not for the purpose of worldly aggrandisement, but only for intellectual and spiritual welfare. Make this knowledge common, and it would be used for the basest of purposes, and often for the oppression and enslavement of mankind."

"Is this knowledge based upon pure science or anything supernatural?"

"Pure science, and knowledge of the laws of nature, but to the ignorant it might appear supernatural, as writing, or telegraphing by electricity appears to the ignorant Savage."

"Without violating your rules can you give me an example?"

"Certainly; encroachments are made upon our secrets every day. With us the telegraph and telephone have been known for centuries; also the art of prolonging life."

"Can you give me any suggestion upon the last subject without encroaching upon the rules of your Order?"

"To a certain extent. There is a law in the animal kingdom that all animals should live five times the length of time it requires to reach full maturity. To reach this period in man it requires thirty years, therefore man should live to be one hundred and fifty years old, but through ignorance, habits, and prejudice, man shortens his own life by the improper use of certain poisons, and the violation of the laws of nature; now the secret is all in first living in accordance with the laws of nature, and next, knowing enough about the chemistry of nature to understand how nature can be assisted, and the life principle supplied. This latter can only be done to a certain extent. We cannot live in this world forever, nor is it desirable that we should. I am four hundred and twenty years old, but it is not possible that I can prolong my life over one thousand years—that is to our present knowledge, but we do not despair of making further discoveries, upon this important subject. We are learning something new every year."

"What are your conditions to enable me to enter into this Order of the Rosicrucians?"

"You must live with me, I will then teach you all the sciences of the world, and if at the end of fifty years, you can show that

this knowledge has never been used for a selfish purpose, but only for intellectual and moral excellence and the glory of God, you will then be allowed to enter the Order of the Rosicrucians; but that only in the first degree, but this degree will be to you like entering into a new world—and one of enchantment.”

How strange is human nature! The farther this conversation proceeded, the farther I felt myself withdrawn in sympathy from my benefactor. Notwithstanding my conviction of his goodness, he appeared to me like something belonging to the world of devils, or the black art. I could not feel towards him as though he was a man like myself; and then at home I had left—well, a girl that I loved, and one who I thought loved me. All this knowledge appeared then to me as dross.

I soon recovered, and then, after many expressions of gratitude, I left. My friend the Count suffered much pain at my departure, but I could not help it. I would have given the whole world for the love of the girl—I reached America and found that she had married someone else. There is no use in making a long story of this. Did you never hear, reader, of such a thing before? Often. But you know not what it is unless you have felt it, no more than you can understand a father's love for his child unless you are, or have been, a father yourself.

Chapter II

I felt utterly alone. Oh, God, how lonely! In the night I would suddenly awaken with a shock of despair, such a shock! In the day the dread feeling was always with me. Nothing could dissipate it. But why describe it? He who has loved and been deceived knows it all. He who has loved and not been deceived or never loved at all, cannot understand the profound depths of such misery. I desired to get away from the world. To shun the society of man. To do something, even terrible, to turn my thoughts from the tortures I felt. Anything would be welcome if it were only a change. I turned my mind to Tyrol. To thoughts of the Count. That strange, wonderful genius, his deep and spiritual eyes, which appeared to look into the souls of men, and into an unseen world. The decision was no sooner made than I started my journey. On shipboard in the idleness of the life, I heard a great deal of the planet Mars. That it was inhabited. I listened to the lecture of Proctor, the great astronomer, as I dreamed of Mars and a visit there. For the first time I could think consecutively of a subject since my trouble. It grew upon me. If ordinary astronomers knew so much of Mars what must the Count know, as well as of the other worlds. Is it possible that God has made so many intelligent beings as must exist in these different worlds, without any power of communication? That cannot be, there must be a way; and I resolved, if possible, to leap the awful chasm that separates us, and visit Mars.

The beginning of the boldest project is the first idea. My dependence was upon the knowledge of the Count. By rapid journeys, I soon reached the beautiful mountains of that earthly paradise—the Tyrol. The glorious Tyrol, which I can never think of but with emotion. The Count was glad to see me. I saw it

in the expression of his fine large eye, and his hand had within it the pressure of friendship.

I said to the Count, "My dear friend, I have come to you because I am tired of the world. The love I felt whilst here and for which I sacrificed so much, has proven false. I am now ready to accept your offer, if your friendship has not cooled under the feeling that I was ungrateful."

"By no means, my son. Those feelings were natural, and did you honor, and though you were deceived, yet you were not lessened by them, and having had a heart trial, you possess the wisdom derived from suffering, and which is different from all others. You are the better fitted to enter into an understanding of those wonderful mysteries, which are incidental even to the degree of entered apprentice in our most ancient and secret of all Orders. Make your home with me. Many generations have died around me, and I long for companionship. The life of ordinary man now appears so ephemeral, that I cease to feel the interest in their friendship that I formerly felt. We will make no plans for a few days. I wish you to have recreation, and time for a rest. I will take you through some of the beautiful scenery of our mountains. We will visit the simple festivals of the peasant, and by cheerfulness, your mind will soon recover its tone." And the Count ordered a bottle of wine. He poured me out a glass of thick red wine, said he, "Drink this. Your blood has been made poor with sorrow."

"Why, Count, that is wine."

"I give it to you as a medicine and it is very different from the wine usually drank. This is made from a red grape. The fermentation is not of the first run only, but is upon the skins and seeds. The alcohol is so little that your stomach will digest it and it will not enter into the circulation of your blood. The mere vinous qualities of the grape, such as tannen and iron and

the coloring matter, will enrich your blood, but as I said, I do not give you this as beverage but a medicine. This is one of the blessings of God that man has abused to that degree that it is a shortener of life; and when charged with alcohol beyond what the stomach can digest, is a poison."

I found that the wine was reviving, and we proceeded to take a stroll down the mountain to an old monastery in the vicinity of the castle.

We walked along the corridors of the old building and the light showed through the little round glasses in the windows like silver. We lingered around this place until night fall, then the stars began to glimmer in the sky. I then, as we were climbing up the mountain upon our return, ventured to speak upon the object I had in view. Pointing out the fiery Mars I asked the abrupt question, "Is that a world and inhabited?"

"Both," replied the Count, "and it has long been the hope of some of the most learned Rosicrucians that in time we might be able to communicate with its inhabitants. We have already brought it very very close to us by the use of a telescope known only to ourselves. Also by photography. After the photograph, we use a powerful magnifying glass. By this means we can see the world, the mountains, valleys and rivers, and architecture; but we cannot see the inhabitants. By the architecture we can perceive, however, that the people are human beings like ourselves, but I judge that they are much more intellectual and more highly civilized than the Earth, Mars being an older world and its conditions being more progressed. The stars, my son, are all worlds, and many of them so vast as to be beyond our comprehensions. Some are dead worlds, which in time will revive, others are inhabited by different intellectual beings than ourselves, composed not of animal substances, but of other elemental substances, many of which are to us unknown."

"Will you let me look at Mars through your telescope?"

"No, my son, not until you are initiated into the sacred mysteries of our Order. This I can have done in the course of a month, and then I can open up to you many of what to you will be wonders of the world."

Thus talking we wended our way home—home I may now call it by that most mysterious of sympathies, which make us feel at home. When night came and I retired to my room, it was not to sleep, it was to think of the strange and enlarged world that opened before me—longer life, knowledge that surpassed all that ordinary people know in this world, and a greater knowledge of other worlds. Existence—the world, the universe looked larger than ever before, more interesting and yet more sad. Why was this? I felt as though I was about separating from my own kind; cutting myself off from the ordinary cares and interests of humanity, but the die was cast, and I resolved to make the plunge.

In the morning, after breakfast, the Count proposed another walk to a beautiful cascade which fell into a rocky gorge, and where the scenery was particularly beautiful.

We sat down upon an old gray rock and whilst listening to the thunder of the waters, the Count remarked, "My son, before sending off letters to my fellow members of my Order and you decide to take the step which will so greatly change your future life, I wish to explain some things to you that you may have full time and opportunity for reflection. It is a rule of our Order to admit no one who by any possibility, we think, may be induced to use his knowledge for the mere purpose of accumulating wealth or attaining power; we have no objection to accumulating wealth, but it must be only the means of an end, not the end, as is the case with so many poor mortals, and thus they become mere victims for the benefit of the most undeserving people, any who may be their relations. The same

may be said of power; we wish to ruin no one. To make a single human being, with all the God-like faculties the good Creator has given him, a mere piece of concrete selfishness is the greatest crime we could commit. This is the reason why the wonderful scientific secrets of our society are not made public."

I fully comprehended the Count. I pledged myself, my honor, to be always directed by him, until I came to a full knowledge of those things which in their highest wisdom, and comprehensiveness, might be for the best.

"Besides," replied the Count, "in your apprenticeship of fifty years, though you will know more than ordinary mortals, yet the highest mysteries of our Order will not be revealed to you until you are made a full member of our craft, after trial—trial of your work in life, your heart, your character, to learn if you can follow the practice of goodness for the sake of the satisfaction that it alone affords you, without the reward of praise, gratitude, wealth or fame. This may seem to you at first above human nature, but as you gain knowledge and live long, you will find it the only satisfactory way to live."

It would require a month before I could take my degree of entered apprentice, and during this time the Count strolled about with me, visiting the loveliest villages and most beautiful places of the Tyrol. In the course of the month, distinguished visitors commenced arriving at the castle from various parts of the world. Some of them were well known in literature, statesmanship and art, and I was amazed to find so many of these characters belonging to the Secret Order of the Rosicrucians.

When the day of initiation arrived, I learned that my conception of the extent of the Count's castle was a limited one. There were subterranean chambers, warmed and lighted by electric fires, which produced a genial warmth and a light as white and more mellow than the light of day. These chambers were

architecturally grand, adorned with allegorical statuary, symbolizing the principles and mysteries of this divine and good Order.

After I had undergone the initiation, I could not but wonder if this was not all a divine instrumentality, to raise man above his present state to one of immortality, and to change humanity in this world from an experience of sorrow, sickness, pain, disappointment, to one of perpetual happiness. It has been an instinct of my life to look for the Divine hand in all things.

It is no part of my object to describe to fellow craftsmen, the wonders of initiation, but to come as promptly as possible to the particulars of my singular adventure.

After the departure of the distinguished strangers, I immediately made a confidant of the Count, who I found as familiar, simple and sanguine as a child. All barriers had been removed. He looked upon me as one to whom he was united by the dearest and closest of ties. He was intellectual, idealistic, and enthusiastic. I again broached the subject of a visit to Mars and wanted to know if this was possible.

Said he, "It is quite possible, but in the effort we risk our lives. The secrets of this world are comparatively unknown, we are as yet upon the threshold of knowledge only—then why, when so much has got to be learned here, should we go so far away, confronting dangers which risks all we now possess?"

I replied, "Count, the knowledge you will gain there may solve some of the most difficult problems here. By visiting an older world than our own, we may even anticipate time, which in any other way is impossible."

"There," said the Count, "you have struck upon two grand ideas, and if this thing is accomplished, we will occupy a high place in the temple of fame among the Rosicrucians. I shall at once investigate the probability of visiting Mars. Our work will begin tonight."

How impatiently I waited! I wanted to escape from the whole world. I wanted to go somewhere, far away from all that made me unhappy.

When night came, for the first time I looked through the wonderful telescope. The like of which was unknown to the outside world; but to which ordinary science will undoubtedly attain. How different looked the stars! Like thousands of vast moons, rolling in space, and yet at those vast distances the sharp bright points of more distant worlds than had ever been thought of before were visible. The telescope was fixed upon Mars. It looked like a vast moon, the mountains and valleys of which were perceptible. Another instrument was placed before the glass. Immediately I saw a variety of beautiful colors, quickly succeeding each other. At first I did not know the object of this, but the Count explained, "That it was necessary to find out the composition of Mars, and this could be done by the discovery of a learned Rosicrucian in the 10th century. It was simply to analyze the colors and this is a great labor, but together we will accomplish it."

"Why is this labor necessary?"

"Because by this means, we may overcome the power of gravitation upon the Earth, and ascend to Mars."

"How?"

"By making a great mass of the concentrated substances which compose Mars. This matter will leave the Earth and fly to Mars."

"Can such things be?"

"They have been," replied the Count.

"How, when?"

"The moment any substance partakes more of the nature of another star or planet than the one it is upon, it flies to it."

"Has it ever happened?"

"Certainly. Meteors."

Light dawned upon my mind.

"Then you will freight a car with the substance that shall have an attraction to Mars, and carry us to it."

"Exactly."

"How will we live upon the way?"

"I shall make both oxygen and carbon for our use. I have lived beneath the water in this way for weeks, occupying a chamber, and out of the laboratories of nature, manufacturing a healthful air to breathe."

"In going through space, may it not require hundreds of years to accomplish the distance?"

"Not at all. When we once leave the atmosphere, there being no impediment, we shall move so rapidly that distance will be merely imaginary."

"When we reach Mars will we not be destroyed by the concussion?"

"Not at all. We will fall as it were upon a cushion, the danger will be from heat generated by the rapidity of our motion through the atmosphere of Mars, and the probability that this atmosphere may not be suitable to human beings like ourselves. In the last case we risk all."

"Can you overcome the first difficulty?"

"Easily. By dropping a portion of the substance which is the attraction to Mars, we shall then float gently down to the surface of the planet. The risk we run is being unable to live when we get there."

"What are the chances?"

"From all the examinations, studies, and analysis that I have ever made, the chances are that the atmosphere and climate will both be congenial and healthful; but I may be entirely mistaken. The experience of ages has taught me, not how much, but how little I know."

I paused and reflected that there was a vast world of knowledge here for me to explore. That I was not like the Count, who had lived hundreds of years, and might stand in the need of a new sensation.

"You hesitate?"

At that instant I felt a heart ache; one of those pangs of sensibility and pain which would visit me at the most unseemly hours. It resolved me. "I do not hesitate, Count. Let us go; let us visit this world and its wonders, and see if we can find anything to benefit mankind. Often one idea is worth—a life."

For months we were engaged in the wonderful laboratory. Work, work, work, was the word and action. The old Romans said work is prayer. I realized this fact by our progress. The knowledge we acquired. This knowledge, which we acquired step by step, and which was to make a glorious pathway to the stars. To call it work was scarcely just. It was an enthusiasm, an inspiration of which we never tired. We forgot our beautiful walks. As the practicability of our enterprise dawned upon us, we became more and more enthusiastic and energetic. In about six months we were able to make a block of metal, which we had the pleasure of seeing rise directly from the Earth in the direction of Mars. It would fall upon that planet and be considered a meteor. We imprinted upon it the form of a man, of other animals, of implements, and a curious picture letter by the Count, which though composed of no language, yet appealed to the understanding.

"How long will it take this substance to reach Mars?"

"Not over three hours."

"What! Three hours? How is that possible?"

"You must remember that space is nothing. The atmosphere of both planets can be traveled in from one to two hours."

"After we start will our passage be so quick?"

"Not quite, but nearly so, not over one hour longer."

"Wonderful."

"So you see it is not so difficult to have a stock of air equal to the occasion."

"But what becomes of us when the atmosphere is removed?"

"It will not be removed, we will make an atmosphere and keep it up at its full pressure."

"But will our car or machine not explode?"

"Not at all. It shall be strong; and the attraction of the particles of matter are more than enough to endure the pressure from the inside. I make my own metals of which this carriage is to be constructed."

The time had now come for physical work, and I was curious to know who was to do it. In a few days there came to the establishment four men, in the guise of pedestrian tourists. They were young men and yet looked old. They had the impress of great and long experience upon their countenances. I was introduced to them as Rosicrucians. They were the workmen, the fabricators of the wonderful machinery. They were chemists, artisans, mechanics. What would not Humboldt have given for their knowledge? They were made full confidants of our object. Instead of looking upon the scheme as a chimerical one, they entered into the project with enthusiasm, and expressed open admiration to the Count and myself, being willing to risk so much in the cause of science.

Our workshop was below the cellar of the castle, in the bowels of the mountain. Various metals were mined from different places in the vicinity. To appearances they were ordinary laborers when out upon the roads. They were not calculated to attract any attention among the people. But after work and in the castle, their manners and conversation was that of traveled gentlemen. But their talk constantly reverted to the projected

adventure. It had for them an indescribable charm. They were fine musicians, and performed upon a variety of instruments. It was not melancholy music, but hopeful and exhilarating. I was very much amused and pleased to find that these wiseacres were quite proud of wandering off into the neighboring villages and attending some of the festivals and dancing with the girls, and yet what permanent happiness could this confer? Women were not admitted into the order of the Rosicrucians. But I was happy to learn that there were divided views upon this subject. Happy, I say, because, there is no joy separate from woman. No heart rest; no real consolation in life. Some contended if women were admitted to the Order, the secrets would not be preserved. That jealousies would be engendered by intrigue, ambition, love of change in both sexes, all of which might seriously militate against that sole pursuit of knowledge which is the first duty of the Rosicrucian. Time would no doubt greatly modify present views, and perhaps in a century or two ideas might be sufficiently progressed to admit of the admission of women to all the secrets of the Order; but not at present. There was now no interdiction upon marriage.

They dived and worked by no fitful starts, but with the regularity of clock work. I worked with them to the best of my ability. My work was educational as I went along. The geology and properties of every piece of earth or mineral that I touched was explained to me. One half of the time of the Count was employed in teaching me the elements of scientific knowledge and how to use this knowledge practically. I thought I had gone over much of this before, and had gone over it in theory during my college studies, but found out that in reality, I knew nothing. How vain is much of the knowledge of schools, but how vitalizing it would be if made actual by work. Using the elementary sciences in an industrial employment, creative and

profitable. I soon learned that the knowledge of the Rosicrucians was not mere theorizing, but it was real, solid, and that their lives were industrial. The world would be truly amazed if it only knew how many of its great scientific and literary men, untiring workers, were disciples of the Rosy Cross. In time I noticed numerous blocks of solid metal, which at first appeared very light to the touch, and when lifted from the Earth, would immediately float against the vault of the cave. It appeared to be magnetic also, and the blocks appeared to have an attraction for each other. This was the metal which consisted of the elements which compose Mars, and which was depended upon to float us to that planet. A great quantity was made in this cave where we worked. The blocks were only about twelve inches square. The metal was then made out of which our car was to be manufactured. The iron was all wrought. In a short time strips of iron were carried to the top of the round tower of the castle. Here the car was constructed by these wonderful artificers; to give an exact description of it would be more than necessary to understand this work. The walls were very thick, filled in with a thickness of at least three feet of wool, besides an air chamber, of three or four more inches. When I desired an explanation of this, the Count informed me that soon as we should rise out of the atmosphere, the cold would be more intense than anything we experienced upon Earth, and that he would not only have to make oxygen or air to breathe, but enough to secure fire to heat the car as the cold in a few hours would even penetrate this thick casing. It is supposed that the cold in space is so intense that it will solidify mercury, brandy, oil or most anything upon Earth, as hard as a stone. The carriage was made the shape of a cigar, of such an arrangement that it would float like a boat upon the water or fall upon the end upon the ground. The time at length came when it was announced that this wonderful contrivance was

finished. We were soon to see if the metals provided to attract the whole thing toward Mars would have this power.

The country people around the castle knew nothing of what was going on, either in the deep caves below, in the cellars, or high up in the tower. Profound secrecy was observed. I noticed that when the hour of completion came, a deep solemnity fell upon all our party.

That day after dinner the Count said, "Fellow craftsmen, the time is now coming when I may part with you forever. We think that we have fathomed all the secrets of science that bear upon this journey, and yet all past experiences teaches us only of our liability to err, and that there is ever more to learn. There is one thing we do know positively, and that is Mars is inhabited with human beings like ourselves. I have examined the photographic views of that planet with powerful glasses, to enlarge and bring out what otherwise could never have been seen, and the grandest cities and architectural works are plainly visible, but when we are once launched upon the ocean of space and are far beyond the Earth's attraction, what disturbing influences may operate, it is impossible to tell. But I am willing to risk my life in the cause of science; more so, since all of our investigations into science go to confirm our instinctive convictions of the immortality of the soul." There was not much more said, but it was decided that in the night at the still hour of 12, the night being dark and cloudy, no moon shining, and not a star to be seen, that the perilous venture should be made. I asked why not make the attempt upon a moonlight, or at least a starlight night?

The Count replied, "We should be seen, and before we got fairly off, become an object of observation to various scientists, which would be violating the secrecy which it is the custom of our Order to observe, and besides, it is our knowledge only that can really afford us light or safety. We will be quite as safe

rising in the pitch dark, among the mists of the mountains, as we would in the very face of the sun."

This self-confidence struck me as sublime, and also assuring. Before the hour came we all knelt down in solemn prayer. I must remark this, about the brotherhood, that there was almost the same diversity of religious belief among them, as among other people. After solemn prayer, we entered the car. The metals of attraction had been carefully attached and in such manner, that any piece could be detached by touching a little spring or key on the inside.

The car was fastened down by heavy chains, which could all be struck off with one blow, when we should rise to go—where?

We entered the car. The small but heavy door was slammed, or rather plugged in, and we were hermetically sealed. I forbear to speak of our adieus, but the reader may be sure they were serious enough. Our room was about 20 feet by 10 wide, and 10 feet high. We were amply supplied with provisions and water.

A fine laboratory was fitted up with every necessary chemical and contrivance, and we also had many tools and instruments, the uses of which I did not understand. Also with fire-arms, books, seeds of different kinds and models of machinery, which lighted the car, and which the Count said would be a source of all the heat we required.

We watched the clock for the hour of 12, when we heard a click and were at once disconnected from the Earth. There was a slight undulatory motion perceptible from the level as I felt myself sliding to one side of the carriage, but the next minute even that was righted. I looked into the glass globe and saw no world, nothing but darkness. I confess I felt strange. I looked upon the calm face of the Count with certain misgivings. The superstition that was in my blood for a minute took possession of me, but I at once recovered upon the reflection that though

my body might be lost, my soul could not be destroyed, and there was very little for me left upon the world worth living for. In the glass globe it looked positively black.

The Count remarked that in a few minutes I would see the stars. Soon as we rose above the clouds, I watched and watched, but no stars appeared. A half hour passed, an hour—one hour, two hours, three hours, no stars. Four hours—the Count began to look strangely anxious. Will the reader believe me? It is a fact, I fell asleep. I had a friend who went quietly to sleep behind the artillery at the battle of Gettysburg. Amid the thunder and excitement of battle. The fact is, with me, nature had exhausted itself. I had been in a great state of mental excitement for some time and nature asserted her power.

When I awakened the Count called me to him to look in the glass. I expected to see wonders; to look down upon a strange star at least, but what was my surprise to find below me the castle we had left, perhaps a half mile.

The Count remarked, "We are rising gradually, and our speed is continual though slowly upon the increase. There is a bed of iron somewhere in the mountains, which has been holding us by its attraction, but when we get a little farther off, we will go fast enough."

No one can imagine the excitement among the people of the village. They turned out universally. We were observed closely with telescopes, we received signals from our friends below. Said the Count, "I have one important piece of news to give you."

"What is that?"

"We are keeping directly upon our course to Mars. Nothing swerves us from that. If the magnet had been a little more powerful, we would have been held down. In another hour we will be beyond its power."

Even this announcement actually took my breath. To think that all upon the Earth had lost its power. I soon saw the truth of the Count's assertion. The Earth appeared to rapidly leave us. The rivers looked like long streaks of silver. The landscape like a beautiful green moss. The woods like dark pictures. The snow and ice upon the mountains like rock crystal finely cut. It appeared to me as if we stood still whilst the world was sinking, sinking, down, down, down into some fathomless abyss. The Count kept gazing also into the globe, with a steadfast, calm and interested look. All of a sudden whilst we looked, the world appeared to leave us like a flash. It looked only like a vast snowy ball.

The Count remarked, "We are out of the atmosphere. The pressure is now from within. A leak and we are lost. A short time will determine it."

I looked attentively at a little apparatus out of which I saw coming a puff of thin white vapor. He said, "So far it is well, but will the carriage hold together? According to all theory and the principles of science, we are safe, but it is practice only that can tell. The metal of this carriage is composed of fibers of the most powerful and compact magnetic attraction. It's to be hoped that there will be no weakness in any part, and now that we are in space comes the strain upon every joint and particle. I have provided for many emergencies, but that is one against which there is no provision possible."

The reader may well imagine that these remarks were not assuring. I still looked upon the great snowy ball, which the Count said was the world. It did not appear to diminish much in size though we were leaving it with incredible speed.

The Count said, "We are now several millions of miles from Earth, and at the present rate of movement, it will require a year to reach Mars."

"Is there a probability of this speed being accelerated?"

"It may be, or it may not be and there is a possibility of our being held somewhere in equilibrium."

"How is this?" I replied in alarm.

"That the attractive forces may be equal from all directions at some certain point which will force us simply to follow some planet revolving round the sun."

"What then?"

"We are lost."

This was not pleasant; I therefore asked, "Did you think of this?"

"I did. It was one of the risks I assumed."

The Count said this as calmly as might Napoleon whilst giving orders under a shower of balls, and yet somehow or other, I think even under those circumstances there was scarcely as much courage required as to occupy that car several millions of miles from the Earth, in space, flying toward a strange planet.

"Count, would not some very sensible people upon the Earth consider a man insane who would broach the mere probability of what we are doing now?"

"Certainly. But even this is not so strange as it would have sounded a century ago to hear a man predict the uses to which steam would be applied, a mere gaseous vapor, moving thousands of tons, driving larger vessels than were ever known before; in short, who would predict all its uses, or the telegraph and many other things, which are common to-day; to the mind of that time they would have sounded like the rhapsody of insanity. In truth what the world often calls insanity is only wisdom beyond its comprehension."

"This reminds me, Count, that one time whilst visiting Dr. Bell's institution for the insane, near Boston, I got into conversation with a lady who was one of the inmates; she asked

me if I knew the difference between the people outside and inside. To get her answer I replied, 'that I could not say.' 'Oh,' said she, 'the only difference is that those inside think differently from those outside.' "

"To a certain extent this might be true," replied the Count, "from the fact that some of the most dangerous lunatics are those outside, who observe all the conventionalities of life and yet throw away all the usefulness of their lives in the pursuit of something which does them no spiritual good; can never really profit them; and injures the community in which they live. They cannot help it, because they are really insane."

"Will you give us an instance, Count?"

"The sole pursuit of wealth, for the sake of riches."

"How about knowledge?"

"This may even become a mono mania, but it is sure to benefit the world."

"Now," said the Count, "we will cease philosophy and begin breakfast. Did you know that I was a cook?"

"I was not aware of that important fact."

"As an entered apprentice you will now have to learn the art of good cooking. It is more essential to health, happiness and long life than most anything else. When I say happiness I mean also cheerfulness. All the graces wait upon good digestion."

The Count cooked a breakfast worthy of the gods. What coffee! It was inspiring.

"Ah," said the Count whilst lifting a cup of coffee to his lips, "do you know that we are upside down?"

"Goodness gracious no. How is that?"

"Our feet are towards Mars and our heads toward the planet Earth."

"You already talk as though the Earth was very distant; something of the past."

"It is far away indeed; I can tell you exactly when I take an observation. We cannot be said to belong to it at present."

In looking into the glass globe only, it was impossible to see any change in our position. At night the view was magnificent. The Earth then looked like a vast moon whilst the stars, unobscured by any atmosphere, had a brilliance which was dazzling. This sight was sublime. The Count remarked that the position of all the constellations were greatly changing relative to us, and that we would soon have a new celestial map stretched out before us.

The different apparatus and chemicals of the Count for the making of air, for the absorption of carbonic acid gas, for the furnishing of heat and light all worked to a charm. Physically we were just as comfortable as we could be upon the Earth, and there was no perceptible motion about the car. It was as though we stood still. We did not both sleep at the same time. One was always awake to watch the different apparatus and to pay very careful attention to the glass globe.

We had now given up all idea of the quick trip to Mars at first thought possible, as we were delayed by the force of counter attractions.

There was one thing which was awfully impressive and that was the profound and perfect silence which reigned. There being no atmosphere there could be no noise outside of our car. Within the car we made an atmosphere to correspond in kind and density to that of the Earth, but beyond all was silence.

One morning when I wakened up I noticed that the face of the Count was more than usually grave. I asked the reason.

"We have deflected from our course," said he, "and are drifting toward the sun."

I felt that I blanched with alarm and asked, "Is this necessarily fatal?"

"No," said he, "not necessarily. It may only be a deflection, and the attraction of Mars may overcome it, but it will elongate our distance many millions of miles, whilst at the same time it greatly increases the speed of our motion."

The Count was very often taking observations. The best were those of the night.

When looking in our crystal globe we covered the eyes, and the effect was to present everything of exactly the same size in nature. By adding additional glasses we were able to give it both telescope and magnifying power to a vast extent. The sublimity of the heavens under these circumstances is inconceivable. The magnifying power, whilst it enlarged new worlds, never appeared to decrease the number of stars sparkling with their sharp points in distant space. This was indeed looking into infinity, but not more so, upon reflection, than when we stand upon the Earth, and look into the starlit firmament. Our vision is more contracted, but we behold the infinite. How wonderfully looked the moons of Jupiter and the rings of Saturn. One night the Count called my attention to the glass and I saw in a distant part of the heavens that a comet had made its appearance with its procession of light. In the course of a few days it had enlarged so enormously that I was alarmed. But the Count assured me there was no danger. The Count said, "The comet is the most direct assurance to me that the entire universe, consisting of our sun and planetary system and other suns and planetary systems extending all through the infinite, are controlled by one intelligent will power, which is omnipotent, infinite and external."

Astronomy is now in its infancy and the science of astronomy as known to the world's people is as nothing in comparison to what is known among the Rosicrucians. The world's astronomy

must command higher telescopic power. The photography of the stars must be better understood. The enlargement of these photographs in order to see their geography and if possible, their inhabitants, their light must be analyzed more successfully than is now done that their geology may be better studied. In short, the world is only upon the threshold of knowledge, and it will not be satisfied. Glimpses have already been had of these very things. We must also consider that the human being of the next geological period in the world will be more progressed than man."

"What do you think he may be?"

"The geological age that produced man, produced the highest type of animal. The next geological age may produce a being as far above man as man was created above ordinary animals."

These were grand and daring conceptions and I could not refrain from asking, "What sort of an intelligent being might be produced and in what respects would he differ from man or excel him?"

"Ah, that is a thought that has puzzled me. It is this problem which may be solved in Mars as that is a world geologically older than the Earth."

In such discourses we passed the time. A few days after I noticed a bright smile of satisfaction upon the face of the Count, and he said, "We have described the arc of the circle in deflecting toward the sun, and we are now moving upon Mars at the rate of millions of miles per day and something will soon happen."

I looked into the glass globe and found that the positions of many of the stars had changed. In other respects it looked the same. Much to my disappointment. In my extreme ignorance I had supposed that the difference in the size of the stars and planets would be very great from what they were

when I had viewed them from the Earth, but I saw no material difference.

Our time was constantly occupied in study, and attending to the different apparatus for the making of air, and also the destruction of the noxious part of it after having been breathed.

The Count remarked that we were moving so rapidly that he had decided to detach blocks of attraction, as I may call it, or perhaps ballast. He touched a little key, of which there were a great number. He said, "I do not wish to strike the atmosphere of Mars at so great a speed, as the present motion would generate enormous heat."

A number more of the keys were touched, but in the dead silence of space nothing was heard. I soon saw a vast moon looming up, the Count pointing toward it said, "That is Mars."

It reminded me very much of our own Earth a few days after we had left it. One might have thought it was always day in our car, owing to the pure white light of our electric fire; after I had been sleeping soundly, the Count requested me to look into the globe, through our powerful telescope. What was my amazement to see a world, with its mountains, rivers, green fields, and great cities. We were not near enough to see inhabitants, but there was Mars stretched before us like a grand panorama.

The Count said, "The mysteries of the world of Mars may soon be solved if the atmosphere and its pressure suit our constitutions."

I noticed that the Count had been throwing over ballast to an extent that was alarming me.

Without our telescope the planet continued to look like a great moon, but it was visibly enlarging.

"We will reach the atmosphere of Mars," said the Count, "in a few hours."

Everything in our car was in the most perfect order, and so far as we could be, we were prepared for it. The excitement in our minds was now so great that time passed rapidly. In the course of a few hours after this, the Count remarked that we had touched the atmosphere, and that we were now floating in it. That he had detached much of our ballast, and that the substance of our machine would be light when it reached Mars, being influenced by the Earth's attraction. I looked out and there was a great world lying before me, cities, farms, woodland, as natural to all appearances as our Earth. It was not long before we could distinguish objects by the naked eye. We floated easily and gracefully as a balloon. We appeared to be moving into a great city, and multitudes of people covered the houses looking at us. Many of them were observing us through telescopes. Shortly we saw immense air ships rise up and come towards us, but as yet we were too high for them to reach us. The Count had discharged so much ballast that our descent was very slow; at one time we actually appeared to stop and I noticed considerable alarm upon his countenance.

"It would be a fearful thing," said he, "if after getting so near to Mars we should not be able to reach it, and then," said he, "when we do reach it, how will the atmosphere affect us, and how will the people treat us? They are evidently highly civilized."

In a minute more the descent commenced, down, down, down we went. The whole country was a scene of beauty. It appeared like enchantment. Now the aerial vessels were around us. Being closely shut up we could not communicate with them. Suddenly we were alarmed by heavy raps upon our car. "Some of these people, said the Count, "are upon the car and are sounding it. They have gotten out of their aerial vessels. They can see that we are a work of mechanism and design, and it is not likely they will do us any harm."

For all that I could see the people were like ourselves excepting in dress, this was different from what I expected. I felt disappointed in one sense and relieved in another. They at least, were not horrid monsters. Down, down we went until we settled light as a feather upon a large flat roofed building. "Now," said the Count, "comes the experiment of testing whether we can breathe and live. I shall do it gradually."

He unscrewed from the side of the car a bolt, placed a ram in the aperture and drove into it with a sledge hammer. He then withdrew the bolts. He approached his face to the aperture and smiling said it is filled from the outside with natural air. He then applied to it an air pump and soon had enough of it to examine.

"We are safe," said the Count, "if the temperature is natural." Soon we heard a pounding, and a motion of the car. Quickly the Count discharged through the aperture a rifled barrel loaded with dynamite.

"I did that," said the Count, "to alarm them and let them know that some sort of beings occupy this apartment."

Soon we unscrewed an immense bolt. This allowed the outside air to be tested quite freely. The smell of it was delicious.

The Count took a scroll of writing, attached to the end of a wand and handed it through the aperture. It was taken immediately.

Said he, "They will not know how to read it, but they will see that we are intelligent beings and perhaps will give us an answer."

Sure enough, a scroll of writing came in; a few lines but we could make nothing of them. Now I saw all was excitement in the countenance of the Count. He appeared to be delighted.

"We are among intelligent and civilized beings," said he. "We will discharge ourselves."

We immediately commenced taking the screws out of the large door, and it was but a few moments after by the use of some levers, that we opened the door and boldly stepped out—into the strange world.

What a glorious sight we beheld! An architecture ornate and yet sublime, stretching away in a wilderness of marble palaces. We appeared to be in a garden and yet upon the roof of a great palace. Fountains were playing around us. Beautiful vases filled with flowers and trailing vines and loveliest statuary were upon each side of us. And also a great number of men and women were about us who yet kept at a respectful distance. And such men and women! The men were the handsomest and the women the most beautiful I ever saw, in form and feature and movement. Had I seen them upon Earth I should have thought them gods and goddesses. In truth I must confess that the Count and I are by no means the homeliest of our species, yet we presented but a sorry contrast to these people. Especially in our strange looking clothes.

The Count, selecting the noblest looking man by him, held out his hand. It was accepted. The Count then addressed him some words, but he was evidently not understood. The man addressed the Count. It sounded musical and sonorous, but nothing that we understood.

The Count then commenced the language of pantomime. This the inhabitants appeared to have some conception of and evidently sent for someone who was not there. The stranger shortly appeared and immediately commenced the language of pantomime to the Count.

“Where are you from?”

The Count pointed to the heavens and bringing out a map of the planets and stars, pointed to the Earth. Nothing can depict the amazement upon the faces of these people at this

announcement. They understood the map, though it must have been quite different from their own, as it was a map made viewing the heavens from the Earth. They soon brought a map of their own which the Count understood perfectly and continued to point to the Earth. They looked upon us with incredulity but also looked at our car with intense curiosity, but did not go near it. The Count invited the pantomimist and interpreter into the car. This invitation was accepted at once. They looked at our pictures, maps, charts, instruments, with wonder. The Count first showed them an atlas of the Earth. This they understood at once and being a confirmation of what we said filled them all the more with amazement. These people were evidently highly civilized and scientific. It was not long before three or four elderly men came who I could at once perceive were men of knowledge. They appeared to understand the objects of our instruments, which fact was quite as amazing to the Count as what they saw was astonishing to them. Several hours were spent in this manner, when it was intimated to us by the pantomimist that we would be taken where we could have refreshment.

The Count remarked that these were evidently a highly civilized as well as humane people, and our only policy was to show them that we gave them our fullest confidence and had no reservations whatever.

What was our surprise when a large aerial chariot came through the air drawn by two enormous birds, and driven by a driver who managed them easily as we would horses. At the request of the persons last mentioned, we stepped into the chariot, and the next minute, were cleaving the air into the city, which we saw was of vast dimensions. We saw a number of these aerial chariots and great birds flying about. In a few minutes we lighted upon what appeared to be the roof of a great palace or hotel. This roof was another beautiful

artificial garden. More magnificent than the last. A fountain was playing, throwing up sheets of perfumed water, vases filled with rich flowers and trailing vines were standing around and exquisite statuary worthy of the chisel of a Praxiteles or Canova. From this place we were conducted down a broad and easy stairway of some kind of soft colored purple stone. We were then ushered into a room, which we found was part of a suite, possessing every convenience. When we got into the principal room, we seated ourselves upon chairs and the first feeling was that of curiosity to look around at surrounding objects. I noticed that the floor was inlaid in geometrical figures and different colored woods and upon the floor in different places were rugs much like our Turkish rugs. The walls were paneled woods and hung with very fine pictures. The chairs were of some light metal with seats of wood, ornamented in what we know as the Renaissance style. The table was in the same style. There were windows of glass, covered with curtains of some material like cotton and richly colored. Our noble looking attendants then motioned to us to walk through the apartments, which we found consisting of rooms with bedsteads and beds, bath rooms, richly frescoed, with pictures and ornamented with statuary, and much to our surprise having a library of books. By the time we got back, refreshments were set out upon the table, consisting of cold meats, fruits, and wine. The personages who attended us then motioned that a servant would wait at the door to receive orders, and then left us alone. This was very delicate and evidently meant that we should be left to take our refreshment and repose alone, to get over our first surprise, and that after this they would see us.

When we were alone the Count said, "What do you think of it?"

I replied that I did not know whether to be astonished or disappointed.

"Why?"

"Things are strange and yet familiar. Though I have met with great surprises, yet could imagine that we had never left the Earth."

"I am inclined to think," replied the Count, "that the same general principles pervade the entire universe, and yet if I am not mistaken, we may yet meet with great surprise. Our flight over this city is one of them. The high civilization that evidently exists is another. If I mistake not, we will find mankind morally and physically more highly developed than upon the Earth. Mars being an older world."

We touched the provisions. The meats were much like our own, the flavor was savory, but not familiar. We broke some rolls and they were rolls of bread like Vienna rolls. Vegetables were good, with these also we were unacquainted. The fruits were delicious, but strange. The wine was natural and mild. The Count remarked that whatever might be the ultimate intention of these people in respect to us, they certainly gave us wholesome food.

We enjoyed our dinner very much, and as it were a great weight lifted from our winds, we were convinced that we could live in Mars.

After dinner the bath. The water was found the same as our own, conducted by pipes. There were cocks and such conveniences as we might find in France or Italy. There were bottles of oils and perfumes on a shelf by the bath tubs of the most exquisite flavor. When the bath was over, the Count remarked, "Our minds are much excited, and for some time back have endured great strain. Before going out to see the wonders which we will probably behold, we should enjoy a sleep. This to depend upon

ourselves, we would now be incapable of owing to excitement. I shall therefore secure for us rest by assisting nature. He took from out of his medicine case a small phial and pouring some white drops into several glasses of water, we drank them off and threw ourselves down, each upon a bed which was in a room adjoining. Sleep came naturally, as it were, and light. How long we slept I do not know, but when I awakened I found that the Count had just gotten up and that it was yet daylight.

We dressed ourselves and I went to the door, and there the attendant was sitting. I threw the door open and found that all of our things had been brought from the car to the hall in front of our rooms. I commenced bringing them in when out rushed three or four men and with the greatest alacrity brought our goods into our rooms. The three men who had brought us here then made their appearance.

One of them by the language of signs then intimated that the persons who had waited upon us had been appointed to attend to us and that one would always be within call, who to the best of his ability would give us anything that we should want.

We were also requested to come out and meet a number of the leading people of the country, who had met for the purpose of having some conference with us. This was just what we expected and what we were anxious for.

We were conducted out of our rooms along a wide hall which was lighted from the top, and the walls were adorned either with frescoes or pictures set within the walls. There were pictures of human life in various phases, some of which we could understand, and some of which were quite incomprehensible. It was not long before we reached a large room of an oval shape, adorned with pictures and statues. The walls of which were in different colored woods. There were some seats around it, and

in the centre was a large space with a raised table in the middle. In this room there had assembled from one hundred and fifty to two hundred people. I was astonished at the nobleness of their mien. They were all men from middle age to old, clad in simple robes, falling from the shoulders to the knee, with bands around the waist; arms partially naked. They wore sandals, and looked like what I might have conceived an ancient Roman senate to resemble. There was a nobility and grandeur about the looks of these men, surpassing anything which I had ever before beheld in any human beings.

When we entered the room they all rose and looked at us with indescribable curiosity, and we must have looked very strange to them indeed, and stiff enough with our European clothes on, and our more diminutive forms.

The person who communicated with us by signs signified that they desired to know from what country we had come. The Count had brought with him a map of the heavens which he laid before them and pointed to the planet Earth. They picked up the map and looked at it with much amazement. In a few minutes there was brought out from an adjoining room a globe representing the sun and the different planets around it, all of a size in just proportion to each other. This surprised us very much in turn. The Count then again pointed to the Earth at which the astonishment appeared to continue. We were kept here answering questions of every conceivable kind for several hours. The questions and answers could only in part be intelligible. Such as how we got there, the distance, how much land, and how much water there was upon the Earth. The animals. The different tribes of men, the arts and sciences. After several hours of such proceedings, we were taken out upon a balcony, which opened to the outside of the building; when the windows were thrown open a sight met our gaze which we

will never forget. There was an immense square in front of the building, which was packed with human beings. Far as the eye could reach there was a dense multitude, and in the distance the house tops were lined with people, many of whom looked at us through glasses. There was no noise, but deep silence, and there was an expression apparently of deep curiosity. After remaining there a few minutes, and bowing to the people, we retired inside.

After this we were taken into a private room in company with three or four distinguished persons, with what object we did not know, but we soon learned that it was merely for the purpose of withdrawing us from the excitement. We were gratified to learn that they were solicitous to take good care of us, but they seemed determined to keep us close prisoners for a time, and I could see clearly that they were not fully satisfied with our story, and had made up their minds to gain more information before adopting a decided line of treatment. This pantomime conversation was at best unsatisfactory. In the private room to which we were taken there was a great deal done in the way of asking the same questions over, even to the bringing in there the map of the heavens. The Count attempted to explain that in a short time he might learn their language. He saw some printed books and manuscript in the room and saw that there was something like an alphabet. I will here state that the Count was a prodigy in learning languages. He had a phonetic way of writing by sound, which enabled him not only to remember words, but to get the exact pronunciation. The Count was familiar with nearly all the languages of Earth, and he informed me that we should soon acquire the language of these people. When he held this book in his hand he signified a desire to know the name of the book in their language; upon a small tablet he drew from his pocket, he wrote the name down,

phonetically. So with every article in the room. Much to the interest of these wondering strangers. At the same time he got the articles, and prepositions. He then intimated that he desired to have the company of the individual who spoke by signs and a good linguist. The latter he failed to make them understand.

He intimated that we desired to go out, but were informed that arrangements would be made for that purpose in the future. This was not pleasant as we were burning with eager desire to gratify our curiosity. We were then shown to our rooms, but the interpreter as I shall call him, remained with us. Night had come, and we had a substantial supper. What was our surprise when everything was brought in upon gold, most beautifully chased with forms of animal life, in a style of art superior to anything we had ever seen. We had soup, fish, and light vegetables, and a most delicious drink, which was neither tea, coffee, wine nor seltzer, but which was satisfying and pleasant in its effects. The Count had his tablets alongside of him, taking down the names of every article, plate, furniture, food. The interpreter thoroughly understood him. He got up and went out a few minutes, and brought the Count a well printed grammar, and dictionary, of course the latter could be of very little use, but what the Count picked up in one afternoon made the grammar of very great service. After dark before we retired to rest, the Count, drawing forth the tablets, gave me the names of all the words he found out, and by the next morning I had committed them to memory.

The Count said, "This language is easy to learn, reminding me very much of Spanish in its sound, and which I regard as the most beautiful language in the world. I judge that its letters are phonetic. I noticed when we were speaking the sounds of our language were all taken down. This will simplify our course and make it easy.

"What we will do is this—I shall take down the names of everything I hear. I will then get the articles and verbs and find out the declensions. I can teach them all to you, and we will converse from the beginning in the language of these people, and get constant assistance from our interpreter who speaks by signs. The civilization of this people and the arts and sciences evidently far surpass the people of the Earth, but I question very much if some of the Rosicrucians who have taken the highest degrees cannot teach them many things that they do not know. I can say, however, with truth, that I have never yet met anyone from whom I could not learn something, and it will be a strange thing if it is not the same with them."

The Count was evidently a little pleased and egotistical.

In the morning we were anxious to go out, and were waited upon by the three savants who we had seen before. We descended the wide and easy stairway into a large courtyard, where we saw that our car had been brought and was being looked at, and examined by some apparently distinguished people and some ladies. This was the first time I had seen women. Something that had been upon my mind ever since I had landed. They were charming to behold, and looked as beautiful to me as angels are supposed to look. The dress resembled the Greek costume with drapery. A dress that set off their forms to great advantage, and showed with surpassing grace. Some had black and some golden hair. Some had fair and some olive complexions. Their features were very regular and forms the perfection of symmetry. It could at once be seen that they were intellectual and educated, and acted upon terms of full social equality with the men. I was glad of this, as it would have been shocking to my feelings to find anything of the eastern habits, as we say upon Earth, in relation to the women. It would have destroyed many of my illusions about Mars. All women look more kind or benevolent from

the eyes than men, and these women in this respect excelled the women of Earth, so that it can easily be believed that their eyes were beautiful. Of course, I had to pretend not to observe them too closely, but this is a summary of my furtive glances. I may say more hereafter. The courtyard was something grander than I had ever seen upon Earth, and yet I at once recognized a striking resemblance to the courtyard of the Doges Palace in Venice. The grand architecture, the superb stairways and entrances to the buildings, ornamented with statuary, but the beautiful bronze wells were wanting. In their stead gushed a fountain of water. The basis of ornamentation was aquatic plants and sea monsters, but the whole combination was of the most graceful character.

The different apparatus, as I before related, had been taken out of the car, and we had given some explanation of these things, so far as we could make ourselves understood. The car stood there alone, and the woods and metals were closely examined. The Count unscrewed an iron bolt, and even to his surprise it immediately flew out of his hand up into the air, and disappeared. Not only to his surprise, but the astonishment of the people. This was a clear evidence that they did not possess what we understand to be iron in the same purity as with us and that the attraction of the Earth or some other planet was so powerful as to carry it away from Mars.

When the Count and myself mentioned the names of several things and they learned that we were rapidly acquiring the language, they were intensely interested and their sympathies appeared to be touched.

I may here as well admit first as last, that in physical appearance and beauty these people greatly surpassed us and any inhabitants of Earth that we had ever seen. We were evidently thought by them to be civilized but inferior humanity from

some undiscovered part of Mars, who were attempting to deceive them, and who might leave in our car. The women were as curious about us as we were about them, but politely so.

In the course of an hour or two the interview was over, and the Count again requested permission to go out. It was intimated to us that the subject would be taken into consideration and we were again taken back to our quarters to resume our studies of the language, which the Count appeared to think of more importance than eating or even sight-seeing. He looked upon it as the key to knowledge. Whilst we were in the courtyard, I saw him observing closely the figures of animals used in ornamentation and they were certainly different from things that we had ever seen. Whether this was fancy, or the poetical license of art or not, was a subject of much reflection with us.

The next morning, after we had eaten our breakfast, which consisted of a drink resembling cocoa and milk, a cereal resembling our wheat, and most delicious fruits, an attendant entered the room and informed our interpreter that it had been decided to allow us to have a drive, and that he and the interpreter would accompany us. At this we were much delighted, and in a few minutes we descended to the courtyard where the most amazing of sights confronted us. This was a large open chariot and two enormous animals of a description that may have been conceived, but certainly had never been seen upon Earth. They were as large as the largest draught horses of Normandy, but in no respect resembling a horse—excepting in size. They were large headed, with enormous ears like elephants' ears, but standing out. Their heads were round and their eyes were not located in front of their heads, but upon top and they could move them so as to look front, back or side ways. The body was tall and gracefully shaped, with wings upon each side, which were not feathered, but like the wings of the bat. Their legs were power-

ful and they had large sinewy webfeet, they had long flowing manes of hair and tails. They were not attached to a pole but to harness around their bodies and reins around their necks. The chariot was made of wood and some kind of metal. There were three wheels. Two very large on the sides and one at the hind end under the chariot.

The driver was mounted in front without a whip. Behind on a high seat was apparently a soldier, armour-clad with a casque upon his head that glittered in the sun; by his side was a sword and battle-axe, and in his hand what appeared to be an enormous cross bow, made of some kind of metal. We took our seats, the driver gave a word and immediately we were off at great speed. We were hurled or driven with the speed of lightning upon a broad road, and soon as we reached it, these steeds used their wings to help their speed. They did not fly, but only used them to aid them. Their great web-feet and limbs appeared to spring along the ground. Our carriage bounded along easily and lightly as a feather. The speed was apparently greater than I had ever experienced before. It was probably thirty miles an hour, which, in a carriage upon an open road, appeared faster than seventy miles an hour in a railroad car. We passed a number of these animals and vehicles. Everything was teeming with novelty and interest, and we were anxious to go at a slower speed and to retrace our steps, in order to get back into the city. This was done and the sight which met my eyes was of the most delightful character. The streets were paved in some places with stone and in other places apparently with hard gravel, or some such substance. They were not dirty, but perfectly clean. Near the suburbs, they were wide, perhaps sixty-six feet, and lined with trees for shade of a useful as well as ornamental kind. Some were nut bearing and others shed around them a sweet perfume. The side walks were paved with bricks and many

of them ornamented with geometrical figures. In front of each house was a small garden for flowers, which also afforded room for vases of flowers, statuary and other ornamentation. It was explained to us, that these trees and gardens were intended for health, as much as ornamentation, but there were some portions of the city more compactly built, with very narrow streets and tall houses, which were preferred by some. We noticed as we were passing along, that most of the houses were small, and that the tops of them appeared to be occupied by the people, even having gardens upon them. Whenever we were shown a house conspicuous for its size or architecture and we inquired about it, we were informed that it was some educational or charitable institution, or public building of some description. We were charmed, however, with the picturesque variety of the little houses, their thrifty appearance, affording evidence of being happy homes. There was no appearance of squalor or poverty.

At the intersections of the streets were beautiful fountains of various designs. Some elaborate and some simple. Most all of them were useful as they had conveniences for watering animals, and large birds, like ostriches, which were a peculiarity of this place, and also drinking water for pedestrians, of which there were a great many. I noticed that many of the latter were armed, and that the wagons and carriages had each an armed soldier upon them, who appeared to have no service to perform, excepting to act as guard. As we were going along, I noticed marching towards us, a company of soldiers. It was the grandest sight I have ever seen. Each was armed with a cross bow, a sword, battle axe, spear and shield, besides having casques and armor of metal. The physical strength required to carry such accoutrements must have been very much greater than that of Earth's people. The men on an average, were six feet three inches tall, and marched in regular step. Time was beaten upon

something like a drum and this was all the music they had. I never saw anything look so martial as this company.

The vehicles we met were of the strangest description. Some were small and others large. Some were pulled by large birds, single and double. Men and women rode these birds. Some were animals, the same as were attached to our vehicle. In passing along, as I would cast my eye up the tops of the houses, I would see on guard armed soldiers. Armed in a manner similar to the others I had seen. This was a matter of surprise to me. It made me feel that there was no such thing as peace in the universe. In a short time we drove into a different part of the city, where the street was narrow, and the entrance was directly into the houses from the street. I noticed the same cleanliness, however. There was barely room for foot passengers upon narrow sidewalks. At an open square we stopped. There I noticed that the streets were too narrow for vehicles and the houses were very tall. We got out of the carriage and walked this portion of the city. We attracted great attention, but the people politely and even kindly opened a way for us. This part of the city consisted not merely of houses for business purposes, but also a great many dwelling houses. We very soon got into the business portions, however, and it appeared to me that if I had been transported back to some portion of the city of Ancient Rome, that it might have resembled this place. The shops were not large but clean, well arranged and everything in the perfection of taste. Shops for sale of cloths, jewelry, clothes were by themselves in certain districts, in other districts the shops had general assortments of goods. It appeared to be the object of these people to make things beautiful, graceful and cheerful. We went into a butcher's shop, and were surprised at the sight we beheld. The floor was paved in stone mosaic, ornamented with the figures of different animals, and most beautifully done. The ceilings were frescoed in colors of brilliant hues. The scales were

large, and the beam chased to represent a hunt. The chain was of the most complicated artistic and wonderful combination. The tables were of pure white stone resembling marble. I could not tell what the meats were, but there was not a utensil, even in this butcher shop, that was not an artistic and elegant ornament, and something typical of the trade, or object for which it was used. The butcher was dressed in white and was waiting upon customers as they came in. We noticed the same artistic characteristics in the shops we entered, in colors, ornament and cheerfulness. So much so, that I could not refrain from saying to myself, this is really a beautiful world to live in. This also gave me the first glimpse of an opportunity to see how the people treated each other, and I noticed that it was with kindness and courtesy. We moved along, followed by quite a concourse of people, until we came to another large open square, ornamented with a fountain, and supplied with water. In this square, was a public market. The people were dressed in the most charming and picturesque costumes. Those who had wagons were divided from those who had none. Most of the animals were of that curious genus, which I have before described drawing our own carriage. They were all ranged in rows along alley ways, so that there was neither trouble or confusion. Their marketing consisted of fruits and vegetables and fowls of different sizes, and beautiful plumage, also preserves and articles preserved by the farmers in glass, and a substance like semi-transparent tin. Our attendant gave us to understand that this was a large business among the farmers. Really there is nothing new under the sun. The fruits and vegetables were all different from those of the Earth. I saw that the people used metal tokens for money, and of fine coinage, but the metal was different from what I had ever seen. One coin was like a metallic transparent glass of a rich purple color. This appeared to be the most valuable. Another was an amber color, but not gold, the

cheapest was a black color. We examined these coins and found that they were composition or metals, but such as we had never seen before. The information that we could get about things from our attendant was quite unsatisfactory on account of not understanding the language. When we looked upon this grand square, I felt that our condition was really deplorable, that we should see so much and not be able to ask a question.

The Count looking at me remarked, "I have been much gratified to day, and yet greatly punished, as there are so many things about which it is impossible to inform myself. Let us return and devote ourselves diligently to the acquisition of the language, and then resume our explorations more intelligently and more creditably to ourselves. When we can once speak we will have the sympathy of the people and more privileges."

To this I readily acceded, when the Count intimated that we would return. This was understood. On our way back we saw several flying carriages, such as we were at first conveyed in to our present dwelling place.

I now commence upon a new era in my narrative. One much more satisfactory to me as I find myself understanding the language of the Country. The study of this language under the peculiar circumstances in which I have been placed has enabled me to realize the beautiful saying of some writer that every time we learn a new language we have opened up to us a new world.

During our comparative retirement when studying the language, we were visited by great numbers of people, who undoubtedly were distinguished. We had become cautious in giving information, candidly stating that we preferred to defer the subject until we became acquainted with the language of the

country. For this every facility was afforded us, and we received the best treatment. For exercise we had the court-yard, and the roof of the building. This afforded us the opportunity of seeing many wonders. We also had entertainment afforded us in music. In the performance of animals we had never seen before, and which appeared to be partially intelligent, all of which assisted us in the acquisition of the language. The first conjecture of the Count, that their system of spelling was phonetic, turned out to be correct. After we had acquired a few words we set ourselves to discover the key by the sounds and signs of the words, and it was not long before we made the discovery. After this our progress was rapid in reading, writing and speaking. What a convenience it would be if the languages of the Earth were spelled and written the same way.

The Count had also prepared a lecture to deliver to the assembled authorities and literary and scientific people, in which lecture he was to give an account of the Earth, the people, their governments, literature, and science; and also a full account of gun powder and steam with illustrations. Which, strange to say, had never been discovered in Mars.

Count: "Now that we have learned the language of the country we will be candid with these people, and take our chances. That of our coming from the Earth to this planet is certainly a wonderful story to make them believe, but they have great scientific knowledge and there are sciences of a practical character in my knowledge that they know nothing about, but which are so wonderfully demonstrative of power and usefulness as to attract their confidence."

Notice was given that we were ready to appear before an assemblage, now that we could speak the language sufficiently well to be understood. They immediately appointed the same evening to hear us.

We were conducted to a different room than the one before occupied. It was a large hall in the form of an amphitheatre. The elegance of this hall was something striking to the eye. The walls were covered with bas-reliefs, colored in such manner as to make every scene life-like. The effect of this art was superb. The roof was an imitation of the heavens in a ground of deep dark blue, and from behind this shone star-like lights, the effect of electricity, and the three moons were represented and shed a soft light over the magnificent hall. In the centre was a raised platform and tables. These tables were works of art, beautifully inlaid. Their legs and feet in imitation of some animal. The seats around, or curule chairs, all single seats were in the same style, and each covered by the skin of a beast like a leopard with the head and glass eyes hanging behind it. On the table were several small electric lights like gas jets held in the hands of small statuettes. The hall was crowded with people. As I looked upon their faces, their magnificent heads, their forms wrapped in togas, the vast size and perfect proportions of the hall, the brilliant and harmonious colors of the paintings, the mellow light flowing over the room, from the deep dark azure of that superb roof, surpassed all my previous conceptions.

The Count had brought into the hall about all of the contents of our car; these things consisted of maps of the Earth, books of geography, natural philosophy, astronomy, chemistry, botany, geology, general literature, machines, a small model of a steam engine, a locomotive and a steam boat, power looms, electrical machines, mathematical instruments. In short a variety of machines incidental to the Earth. Seeds, specimens of woods, plants, minerals, in short everything that the provident mind of the Count had thought might be of interest to a strange people upon another planet. There we stood in the midst of these, to them, curious things, whilst they were waiting in anxious expectation.

The Count decided to begin not with any description of the Earth, its geography, climate and inhabitants, but several of our inventions, which we knew they did not possess. He at once described gun powder. How it was made, its properties, and power. They looked at each other with incredulity. The Count loaded a pistol of large bore and fired it off. The noise was unexpected and evidently startled them. The Count then picking up a rifle stated that with that implement he could kill the most ferocious beast upon the planet of Mars. He also explained that with a small quantity of harmless-looking powder he could blow the building up.

I noticed that the Count was allowed to proceed and that no questions were asked, but notes were taken.

He then explained the steam engine and set his model at work. Explaining all that it had accomplished upon Earth, its power and availability for speed, upon land, and water. Whilst he was talking, the little machine was running and puffing away as though joining in the conversation.

He then explained the electric telegraph. After he had done with the physical sciences, he then explained the geography of the Earth, and reserved the rest for another lecture. He had been lecturing for four hours to an audience, which had given him breathless attention. We were then escorted back to our rooms with the request not to retire immediately as a committee would wait upon us. We then waited in our rooms in anxious expectation.

In a short time the Committee returned and the spokesman said, "Our country is infested by dangerous beasts on land and in the air." Our marvelous accounts heretofore had sounded incredible, but such proofs were given to night as had gone far to remove their doubts. They desired another proof, and that was to see the Count kill one of these beasts the next morning.

The Count replied that for the sake of convincing them of the truth of his statements, it would afford him pleasure and especially if these beasts were man eaters. That upon general principles he had conscientious scruples against taking any kind of life, unless for food, or from necessity. The Chairman replied that they were man eating beasts of the most frightful character and that they had to keep up a standing army of men for the sole purpose of defending the community against them. The Count promised to give them the most convincing proof of the power of fire arms the next morning at such hour as they should appoint. They requested the Count to be ready by 8 o'clock.

After they had departed, the Count said, "This thing now becomes interesting. I am a dead shot with nerves of iron, and if the vital spots of these animals are the same as upon Earth I need but to see them long enough to get one shot to insure their death. But to make assurance doubly sure, I shall use explosive balls of the largest size. This feat will be of infinite service to us."

"What is the secret of being a good shot?"

"Practice, my son. Constant practice. In the Tyrol we have some of the best marksmen in the world. It has always been a pleasure for me to practice at a mark. It is a pleasant distraction. Whilst traveling with a party in the wilds of America, Africa or Asia, it has been my usual business to supply the animal food. I have often been attacked by hungry lions or tigers, and have never failed to hit them in the eye or under the shoulder. I have thus killed the grizzly bear of North America. An unusual feat, owing to his great agility. But I advise no one to hunt the Grizzly."

The next morning we were up early, and upon opening my eyes I found the Count cleaning his rifle and putting it in order. It was a self-cocking repeater. He could load it with from one to

sixty cartridges and it carried ounce balls. These cartridges were charged with dynamite, the balls were loaded with dynamite, and would explode on striking bone. The metal of these guns was forged and the guns were made by Rosicrucians. He had a rifle also, which would carry a two-ounce ball, one which would also carry a half ounce. He also had a self-cocking pistol which would carry a half-ounce and one that would carry an ounce ball.

The Count remarked that with dangerous animals it was folly to trust to small balls. Many of them could take small balls almost as easily as bread pills, but a large ball had a paralyzing effect if it did not kill, and they would at least stop them long enough to give you another shot. I thought this was good philosophy.

When breakfast was brought in, the Count, with the assistance of a spirit lamp, made a cup of coffee for us. What nectar!

"Count, do you think coffee is injurious to the health?"

"You mean good coffee?"

"Certainly."

"How can a thing be injurious that is so excellent in its affects. Too much of it—or bad coffee—or the abuse of it may be injurious."

At eight o'clock the summons came. We were taken to a chariot, to which were harnessed several birds of an immense size and away we went over the houses to the suburbs of the city, where we were let down in the middle of a large court yard, which appeared to be surrounded by military barracks. On the walls were mounted soldiers in glittering armor, armed with cross bows, battle axes, and swords. We were met by all of the people who had attended the lecture the preceding evening. We were then conducted through a low door-way to the menagerie. This was upon the side of another court-yard enclosed by high stone walls. The menagerie held a number of singular looking,

large and ferocious animals; not one identical with any species upon the Earth, but approaching them in resemblances. Some were like exaggerated lions, others, tigers; another a serpent forty feet long and eight or ten feet with claws. This was a lazy looking thing. The others, however, stamped up and down their cages and made ferocious noises. These were the most dangerous beasts of prey. They were kept here and fought the soldiers in the arena for practice. They were not fought by criminals or gladiators as in the days of ancient Rome, but by regularly enlisted and trained soldiers. Their mode of fighting may be of interest farther on, but now we will confine ourselves to our own business. One of the Committee pointing to a ferocious looking beast, resembling a combination of lion and elephant, wanted to know if he could kill him, with his little machine, pointing to his gun.

The Count replied, "Yes, and if you allow me to stand at the other side of the arena, I am willing that the bars of the cage shall be let down and I will guarantee to kill him before he reaches the middle of the arena."

"No, no," replied the generous Marsian, "your life is too precious to risk, you can stand on top of the wall when he is let out, and shoot him from there."

"Never," said the Count. "I insist upon going in the arena, otherwise I decline the test."

At this they were all amazed, and I was made anxious. I did not know the Count's nerve and skill. They expostulated with the Count, but in vain.

Said he, "I shall never shoot the beast from a place where I will be wholly secure myself."

It was then decided that the Count should take his stand on the other side, when the beast should be let out. All the spectators left the arena, and ascended to the seats around it, and

these seats ascended on all sides in the form of an amphitheatre, and were enough to seat about 100,000 people, but there were not over 500 present.

The Count told me to leave the arena to him. This I declined to do. I saw a soft expression in the eye of the Count, and he replied, "You are safe. Take this rifle, and fire if I tell you, not otherwise." He gave me the one that carried the heaviest ball.

We both then took our stand upon the side of the arena immediately opposite the door through which the monster would come. The immense cage by means of machinery was moved to this place. All had then their seats. A silence pervaded the assemblage like death. The iron gate was lifted up and out bounded the beast. At least fifteen feet long, spotted all over most beautifully, tail standing erect, with a great tuft upon the end of it, waving very slightly; he had a mane of hair running down its neck, his mouth and teeth were immense, and eyes of fire. He must have weighed several tons. When the bars were raised he jumped into the arena, then stopped and looked around. Suddenly his eye lighted upon us, we were distant about one-hundred and fifty feet. The animal did not crouch and move towards us, but made a spring. The first jump was fifty feet. The Count raised his rifle, the moment he touched the ground he fired. The animal crouched, it could be seen he was hit in the eye, it appeared that the side of his head was blown off, but imagine our astonishment when he did not fall. It was only to him a tremendous blow. He was astonished but not fatally hurt. He braced himself for another spring, which he made, another fifty feet. Soon as he lighted on his feet, I heard the crack of the Count's rifle, and away went the other side of his head. This blinded and bewildered him. He now sprang in the dark. The Count moved his position to the left, I quickly followed. This placed us on the flank of the beast,

who was now making a hideous noise like thunder, and lashing his flanks with his tail, and snapping the air with his mouth and striking out with his paw. The Count raised his rifle and gave him a shot under the shoulder, when he fell dead. This was an amazing success to the auditors, but a disappointment to the Count.

His first remark was, "I must dissect the animal's head, but I must try another with a two ounce ball." He signified to the manager to let another loose, and he would try to do better the next time. He was evidently dissatisfied with himself.

The manager said they were more than satisfied. The Count insisted. They then acquiesced. We again took our stand. The Count took my rifle which had a shorter barrel, but was heavier than the other; I took his rifle and held it in a rest and aim.

The signal was given. The great metal bars were raised, and out jumped another ferocious beast of the same species as the other, but terribly excited. He had smelt blood, and saw us at once. He made a jump and appeared to be at least fifteen feet in the air, and as though he would light upon us. This time I heard the report of the Count's rifle before he touched the ground, and the monster fell a corpse. A few convulsions of the limbs, that was all, and the noble beast was inanimate as clay. The ball had shattered his immense head in its explosion.

"The heads of these beasts are of a peculiar anatomy," said the Count, "the other balls are too small."

To express the joy of the people at the result would be impossible. They were enthusiastic. They poured down into the arena and surrounded the dead beasts and looked upon their frightful wounds, caused by the explosive balls, with wonder.

This last act appeared to remove every vestige of a doubt concerning us, and it was now our turn to be really lionized, which had not been the case before.

It was now proposed that we should witness a combat between the soldiers trained for the contest and one of these beasts. We were informed that there were large districts of country uninhabitable by human beings in consequence of the number and ferocity of these monsters, and upon the outskirts of civilization that guards have to be maintained, and that an incessant war is carried on at the cost of many lives. We were then seated high up among the spectators. Shortly a great door opened and in marched twenty-five soldiers, armed with swords, cross bows, and battle axes. I noticed that the cross bows were of great power wound up by machinery, and that the shafts were of metal. They must have possessed terrific force. These were noble looking men who marched in, and I could not look upon their stern and resolute faces, but with sadness. There were five soldiers who carried an immense net, made of some kind of metal. This was with the evident intention of throwing over the beast. The soldiers were ranged at the side of the arena opposite the door. At the given signal it opened, the bars of the cage were let down and in jumped the beast. At once the shafts were let fly. They nearly all hit him; some evidently passed into his body. Some were sticking all over him, but no vital spot had been touched, and he was on the soldiers in an instant. Soon as he reached them, the net was thrown over his head, when he rolled over and over, and around the arena to disentangle himself, whilst the men who had thrown the net ran in different directions to avoid him. The soldiers continued to pour into him their shafts, but the net itself in some degree defended him. In a minute more he had torn himself from the net and jumped among the soldiers apparently killing two of them at a blow, and lacerating a number of others terribly. The roars of the beast could be compared to nothing less than thunder, and

the whole arena was filled with dust and blood; the men did not show the least cowardice or flinching, but the contest was more equal and more terrible than anything I had expected, and my mind was in a fearful state of excitement, much more so than when I was in the arena myself, as with the Count by my side I knew there could be no danger. I now did a thing without any reflection, or even self-consciousness, and I can only ascribe it to the frame of mind I was in. When I saw a great number of men prostrate, and when the monster was just in the act of lacerating a poor fellow to death, I raised my rifle and gave him a ball right under the shoulder that made him jump ten feet in the air and fall dead; I was terrified at the impropriety of the act. I explained that it was wholly involuntary, and unpremeditated, and that I had been under the influence of great excitement. They all accepted the explanation, and really appeared to understand it. The Count instead of being displeased enforced my explanation, and was evidently glad of the act.

The Count requested one of the animals for dissection, and it reached our quarters almost as soon as we got there.

A meeting was appointed for the afternoon of the same day to hear the Count give the rest of his wonderful lecture.

A room was furnished in which to dissect this strange animal. We found the anatomy of it to compare with that of the lion, excepting that the skull had four separate divisions, separated by thick bone, each division filled with brain matter and the nerves communicating with the spinal chord. This was the reason the animal is so difficult to kill. The vital spots were at the base of the brain, or brains. It would not be safe to hunt these beasts with any rifles but those of the heaviest calibre, carrying explosive balls.

We were now escorted to the hall by men of different manner and appearance from those we had met heretofore. We

were treated with the greatest respect and consideration. The triumph of physical power, how much more it is calculated to impress than the most profound truths in the abstract! The mind's eye how few possess it? In his next lecture, the Count entered into the rest of his subjects connected with the Earth, and reference to his books, which treated of each subject. A committee of linguists were appointed to acquire the languages of those books and to translate them. The character of this work may be estimated from the fact that they were in seven different languages. The Count engaged to lecture every night until different subjects were exhausted. Each lecture was taken down in short hand, and printed off in millions of copies, and distributed over the land. Newspapers existed, and had existed for thousands of years, but until now we were not permitted to have them. We were greatly amused at the comments concerning us, and the lectures of the Count.

We were astonished to find out about the enemies to mankind that existed on Mars, and particularly of an enemy, the anatomy of which we carefully studied by such drawings as we could get a hold of. It was an immense winged Gorilla, wings like a bat, but of more intelligence. Some supposed that there was a connection between this species and man. They inhabited caves in distant mountains, from which they would emerge and attack farms and villages occupied by human beings, carrying off women and children bodily and murdering men. They were armed with clubs. There were numbers of aerial chariots and soldiers to resist them, and this was the reason why there were so many soldiers in all directions mounted on vehicles, and in different places. The Marsians were anxious that we should try our fire arms upon them in an aerial encounter. And also, that the manufacture of powder and firearms should begin. For this drawings were

made and every preparation commenced. It was found that any number of able engineers and draughtsman were to be had. I shall state that all the people in Mars appeared to be educated. The Count found a metal in general use harder and tougher than our iron and steel; drawings were also gotten out for a steam engine. There were excellent machine shops, smitheries, and founderies, where it was astonishing to see the excellence of their work, and the power they controlled without steam. They understood electricity, water power and the use of wind mills. So far as they did go, they surpassed any mechanics upon the Earth. The Count made for them a rifle and a fulminating powder, only known to the Rosicrucians, and superior to anything known or used upon Earth. The terrible enemies to which they were subjected excited his most profound sympathies.

The Marsians possessed about four times the strength of the average man on Earth, and the Count gave them the drawings of a self-cocking, repeating rifle, which would carry a three ounce ball and made in very few parts. One morning we were surprised at being presented with one of these heavy but elegant rifles. It was too heavy for me, and more than the Count could handle, but for the Marsian, it was as light as a Henry repeater to an American soldier. The accuracy and execution of this weapon were something fearful. In a short time numbers of them were turned out, and the men were at once set to practicing at a target, stationary and movable. In this they showed great facility, as they were skillful marksmen with the cross bow. Drawings had also been given for pistols. A small cannon and a fire arm which would carry a pound ball or shell, and which was divided in two parts to be carried by two men besides their other arms, and put together when wanted for use. This was a powerful and effective weapon and made of some

infantry companies practically, artillery companies, enabling them to fire at a very long range. Telescopic sights were also added to many of the rifles.

The progress of this work afforded us a most delightful opportunity of becoming acquainted with the manners and customs of the Marsians. All the drawings and work which we superintended was done at one large shop or works, or college of work, whatever it might be called.

The building occupied the whole of a square, and was of two stories. There were two entrances, one upon two sides of the block. This square was about 1200 feet each way surrounded on all sides by lights. In the centre was a building four stories high, occupied by draughtsman. Surrounded by lights upon the upper floors, there were sky lights in the roofs of a soft violet color. On the lower floors, the upper glasses of the windows were of this color. The lathes ran all around the building and the power was communicated from an electric machine. The power which worked the electric dynamos was obtained from the action of the tide, several miles away. There were several engines which were constantly working, one worked by the ebb and flow of the tide, the other by the water power communicated by the basins filled at high tide, and another portion worked from the pressure obtained from water forced into high basins by hydraulic rams, worked by the tide. Thus the vast power of the tides was utilized and made subservient to man. This power ran the electric machines, though located at a considerable distance, and the electric machines furnished heat, light, and power of the lathes. I appreciated the superior intelligence of the Marsians upon this subject, when I asked myself why London and New York might not be lighted and heated in the same way and thus an escape made from the soot and danger of coal and petroleum.

The rooms were all ventilated top and bottom; on one side of the square there was nothing but boys, and the mechanics, their teachers. These boys belonged to the public schools. One set worked five hours in the mornings, another set five hours in the afternoons. These boys were thus practically taught mathematics and physics and many of them who had a natural taste for this branch of mechanics, I mean machinery, adopted it as an art. The other three sides of the building were occupied by the men, for different kinds of machinery, and manufacturing. The rooms were beautifully clean, nothing was wasted. A valuable use was found for everything. Economy was taught in these schools, and practised by them as the highest philosophy and morality, by the pursuit of which man could the most nearly imitate the Deity.

There was also a novelty which may be interesting to remark. In the centre of each hall there were five or six singers, without any instrumental accompaniment, but only their notes upon stands before them. Every half hour they would commence a melody, which would be joined by the men, from one end of the room to the other, and taken up and carried all around the squares. It was very seldom that different songs were sung in the different rooms at the same time, but would be taken up, one after the other. This quite surprised me and I ventured the opinion that it must interfere with the work.

"No," replied the Foreman, "it improves it and it develops skill and beauty in the work."

I then said that I was a votary of music, that I enjoyed it, and was a thorough believer in it, but I must differ with him as it appeared to me to be out of place in a machine shop, in the midst of so many other noises, and when the attention must be otherwise occupied.

He looked at me in great surprise and said, "Do you not notice that the music drowns those discordant noises? It makes

the mind cheerful, and harmonizes the whole being, and what harmonizes produces beauty and strength, which flows naturally into art. It is not out of place here, it requires no mental effort, but is a relief to the mind. Music should not be used for the sensual part of it, or as a luxury. In that way it would be demoralizing like many other good things, but it should be used as one of the most harmonizing and highest spiritual gifts of God to man." At that moment a spirit stirring melody was poured out, which was taken up and swelled through the vast room like the voice of angels. The foreman, as though struck by an inspiration, quickly went to his work and I then thought to myself, if music will make men march better, or fight better, why should it not make them work better. I noticed also a feature in the work, and that was everything was chased and ornamented with artistic devices associated with its use. I asked for an explanation of this, as the chasing or ornamentation added to the cost of many things which were for the humblest uses. The reply was that it was in such things the higher faculties of our nature should be constantly gratified and cheered. Thus it was that the poorest piece of crockery, the commonest table knife, a wood axe could be made an object of beauty. Verily, I said to myself, these Marsians are a strange people. But not to digress, the manners and customs of these workmen were quite strange. They all as it were, formed one family together with the employees and foreman by the singular rules they adopted. Collectively they were a great beneficial society. There was a monthly contribution, very small, to be sure, but sufficient to support any family in the case of sickness. In case of death, a special contribution or assessment was made upon each one, which practically amounted to a sufficient life assurance to provide for the widow and the education of the children. The wages paid each week were only nominal, enough for the support of

the families, the balance was paid from profits, in which each man had a share. One-third went to the proprietors and foreman; two-thirds to the artisans. Out of these profits there was a small reserve sinking fund to protect the concern against losses, or unprofitable seasons. Opposite to the shop, on the other side of the street, was a large building owned by the Company. In this building was a library owned by the concern, consisting of mechanical works of all kinds, and literary works, amounting to many thousands of volumes.

Here were also located reading rooms. The members were also allowed to carry their books home. In the same building there were baths, the rooms were made cheerful and beautiful by painting and statuary and the conveniences were such that bathing was a luxury. In this respect the Marsians, as with the Greeks and Romans, may have gone to an excess. Their baths were open for the families of the workingmen, the women and children. Also the library.

In another portion of the building was the gymnasium. Their exercises were always accompanied with music and were evidently intended to rest the system. In another room was what was called a rest and conversation room. Here men and their families met for social intercourse and conversation. Tables were arranged around, provided with games. The walls and ceilings were frescoed with paintings and at certain fine points of view there was beautiful statuary.

The abundance of painting and statuary was at first unaccountable to me, but this I will shortly explain. In the same building was a large restaurant, of faultless cleanliness and pervaded by the same beauty, in walls, ceilings, floors, tables, chairs, that we saw everywhere, as those elaborately ornamental things were of the cheapest. Here everything was furnished at actual cost after having been bought wholesale, and much

cheaper than they could provide themselves at their own homes. The men usually dined and supped in this place, being joined by their families. On the top of the building was one of those glorious promenades, and gardens of flowers, statuary and fountains peculiar to this place. I noticed that the principals of the establishment with their families attended these baths, and the restaurant, the same as the workmen and outside of the shop I saw no distinction.

I said to the Count one day, "Is not all this harmony, beauty and content something akin to what we imagine heaven to be? When do you think we will have it upon Earth?"

"Soon as the people, by which I mean all those who govern and those who are governed, are sufficiently civilized. Civilized morally, intellectually, and physically. Here you find a people many generations in advance of the Earth, and all that you see is possible, because every human being is not only educated, but trained in a manner to fully develop their intellectual and physical powers. As we study the manners and customs of these people, we will learn what that ideal and glorious thing called liberty on Earth really means, and why people have so often been disappointed in their aspirations."

"Do you despair of it upon Earth?"

"Not at all, we have cause for encouragement. It will come as people emerge from the feudal customs and laws of a past age. In proportion as they have done so it has come, and it is intimately connected with education and training. Of the two the training is equal if not the most important. What has not the past four generations done for mankind? Four generations ago real liberty was unknown. Now it is raising its head in America, England, France, Germany, and Italy, and other countries."

There were four such establishments as this, where much of our work was going on, not only this, but special machinery

was being constructed for its manufacture under the inventive genius and mechanical skill of the people, and each rifle as it was turned out was a beautiful example of workmanship and art. The stocks were ornamented with figures of animals, inlaid with metals, and the barrels were chased in the same style of ornamentation. Utility as separate from beauty did not appear to enter into the mind of the Marsians. The Count, among the extensive stores of a chemist's establishment, where things appeared to be kept wholesale, found the ingredients for a fulminating powder of even greater force than dynamite.

As before stated, some twenty five of the rifles were turned out complete, and after some careful practice, it was decided to give a public exhibition of their power, upon some of the most ferocious beasts. Public notice was given and the immense amphitheatre was crowded by at least 100,000 people, men and women. It looked like a sea, or rather a mountain of heads rising to the skies. It was a sublime sight.

At a given signal the soldiers marched into the arena, which had heretofore been the scene of so many misfortunes, whilst training in actual war to fight the ferocious monsters which devastated the land. They marched in and took their positions as heretofore, opposite the door through which the animal was to enter. At another signal the door opened, and in jumped a beast from fifteen to twenty feet long, and larger than any I had seen. He sprang towards the men at once. Upon the word, they all fired, when he appeared literally torn to pieces by the big balls, bursting in his body like small shells. A roar of applause went up from the multitude like thunder. A number more of them were slaughtered in the same way, that afternoon, killed upon the first fire, and this was done not only to exhibit the miraculous power of these fire arms, but to give the men entire confidence in them. Nor must it be thought inhuman, as it was

not done for sport; and when the reader comes to recognize the awful necessities of it, he will find Mars possesses its terrors as well as beauties. These terrors were not only upon the land but filled the air.

Chapter III

It may be thought that by this time I should give the reader some account of the geography of the country into which we had fallen, and of the entire planet; also some account of the inhabitants, their manners and customs.

In truth, up to this time, we have known little or nothing. Our days and nights having been devoted to the study of the language and giving directions in the machine shops, and having up to this time been kept in comparative seclusion.

By a geography that we got hold of, however, we found that the inhabitable portion of the planet was comparatively small, not over two thousand miles wide. That the arctic regions of the northern and southern hemispheres encroached very far upon the planet, and that the world was freezing out, and that the inhabitable portion was immediately around the Equator from 600 to 1000 miles north and south of it. We had fallen upon a small continent or island immediately in the tropics. The continent was about four times the size of England and Scotland. Beyond this there were two other continents; one about 500 miles to the west of us; the other about 4,000 miles.

The physical characteristics of this globe were different from our own. The mountains were vastly higher, some being estimated to be ten miles high. These mountains were filled with vast caverns, which seemed to penetrate down to the centre of the planet, and were said to be inhabited by a strange race of beings, different from any known, and with which the human race had been unable to have communication. Some of the mountains and caves were also inhabited by another race of animals in the shape of huge gorillas with wings, animals that armed with clubs would invade the civilized districts, murdering the men and carrying off the women and children; besides this

the animals that infested the forest and rivers were of a huge description of savage monsters. The sea was salt, but far more tempestuous than that of Earth, and filled with leviathans that asserted their control of it against the puny power of man. Such a thing as commerce over these seas was a matter of extreme difficulty, and could not well be pursued as a regular business or for profit; but these continents were inhabited by human beings and other creatures which I shall attempt to describe should we visit them.

The Government of this country appears to be a mixture of a republic and democracy. There is one striking contrast to the Earth. I see the evidence of great wealth upon every side but very few or no rich people or poor people. On the Earth we see both classes, but it is the fate of nine-tenths of the masses to be what is called poor. On Mars I have not seen one poor person. In the city where I am, I have not seen one beggar, one evidence of squalor or poverty, and no idle people of affluence and no unhappy looking people. In the newspapers I see no accounts of crimes, but a mild sprinkling of politics, scientific papers—a great many, poetry, marriages, festivals, new improvements, discoveries, battles with monsters, astronomical observations, games, and suitable novels.

Before entering upon our own voyages of discovery among these people we thought we would first gain their confidence, as I have said before, by letting them know all about us, and this is progressing in a manner apparently the most satisfactory to them. My curiosity is intense about these people, as what I see is so utterly different from the Earth, and yet they apparently have the same form, the same affections and the same natures. They are larger than our races, the height of the men averaging six and one half feet, and their women from five to six feet. Their forms are more perfect and statuesque. Another feature

I notice, their sense of modesty is not so great as our own. It is evident that they have no thought of indelicacy, and custom no doubt habituates them to such things. The men are bare legged above the knee. They wear light breeches, buttoned around the waist. Sometimes a waistcoat, sometimes none, and a mantle covering their shoulders and falling to their feet. This they drape most gracefully, but these men in the gymnasiums are naked, also in the baths. Where women are present in the baths, both sexes have a slight dress around their loins. The ordinary dress of the women is nothing but drapery, and that worn carelessly. It looks very handsome and classical, and the women are extremely refined and modest looking, but their careless dress belies their looks, and whilst it all might have passed in ancient Athens or Sparta, it is too shocking to my sense of propriety to advise it at the present time. But the attractiveness of it to the looks, in the way of the graceful and the picturesque, with their easy flowing drapery, the sandals showing the feet, the harmonious combination of colors, are beyond question. The men look like gods, and the women goddesses. As I said before, I see no evidence of depravity, licentiousness or immodesty of thought.

The Count suggested that we should clothe ourselves in the same way. I well remember the afternoon when our clothes or robes came home. My sensation was that of being in undress, but in truth I must confess it was also one of delightful ease and freedom of the limbs.

"Count," I remarked, "do you not consider the costumes of Mars immodest?"

The Count laughed at the idea. "My dear boy, that is a matter of conventionality, habit. Of course it cannot strike these people who have been brought up to it the same as it strikes us. Besides immodesty is in the mind. Even upon Earth I have known some people of the most depraved minds the strictest

observers of propriety. In fact, I have sometimes thought that a familiarity with the human figure, to such a degree as to make morbid curiosity impossible, would be purifying in its results. In some nations of the Earth which I have visited in my travels, I have seen this to be the result. Artists who make the human form a study, and particularly its beauties, appear to me to be as pure in their tastes and practices as other people. I have never heard Raphael or Michael Angelo, or other artists who excelled in the delineation of the human form, accused of impurity. I think with the ancients that it is a noble temple, and that attention to cleanliness, health, invigorating exercises, in short the bringing of the body to a high state of perfection, is a religious duty, as it shows a proper appreciation of God's greatest earthly work."

The longevity of the people upon this planet appeared something enormous. About two hundred and fifty years is the average of human life, and I heard it said that their records extending back many thousands of years went to show that at one time the average of life was under a hundred. The city we were in was evidently the capital of the country, but it was not a seaport, though not distant from the sea, the roar of which we sometimes thought we could hear, and from what we learned the sea was far rougher than upon the Earth, in the tremendous swell of the waves; so much so as not to be navigable for ordinary purposes of commerce and travel. It had been many years since a ship had visited the country from any of the other continents. The city we were in was a spacious city and remarkable for its health, cleanliness and drainage. It was not level, but of irregular surface, and this was considered one of its greatest beauties, for architectural effects and drainage. The architecture appeared to be of different periods. The buildings were all of stone; very convenient, but many of them undoubtedly dated back to a remote antiquity, and such build-

ings were highly prized or venerated. Every house was supplied with both hot and cold water by pipes from distant reservoirs. No house was connected with the sewers. The water drainage of the house ran into the streets and from there found its way into the sewer. No dirt of any kind was allowed to go into the sewer. It was all utilized; what was slops suitable for animals was all saved. Excrementitious matter was removed every day from each house. The city supplied a chemically treated dry Earth which was used in the closets which were so located in the houses that each day a drawer could be pulled out and a box shoved in, carrying away what was necessary and supplying everything wanted in its place. I am particular about mentioning this and their system of sewerage, as they ascribed to these things their longevity. The sewers were in the centres of the streets and contained all the water mains and electrical wires for conducting heat and light, and were kept perfectly clean and well ventilated. We can thus see that it was impossible to have any poisonous gases rising up through the houses, or at the openings of the sewers in the streets. The droppings of animals in the streets were shoveled up fresh by boys, and placed in iron receptacles or boxes alongside of the streets, the same as I had seen done in London. The streets were swept every night and washed. They were never allowed to get dirty. I was informed that the revenue derived from the cleaning of the city by the sale of the dirt as a fertilizer much more than paid the expenses of cleaning.

When I reflected upon their sewage system I contrasted it with the murderous effects of that in the United States and Europe. I felt that this single point of superiority raised their civilization infinitely beyond that of the Earth. More so when I reflected upon the millions of lives of the youngest people, as well as old, which were annually destroyed in large cities of the Earth by reason of sewers which were perpetually forming

poisonous gases and which were directly connected with the houses; and by this means the palaces of princes, the grandest hotels, and finest houses with what they call all of the modern improvements, become literal death traps. In the chambers of the great and luxurious rises up at night time the light and gaseous vapor, coming up through the pipes of the bath room or the innocent washing conveniences, and materializes a fever spectre that hovers over the innocent sleepers—the father, the mother, the children, sweeping them away by millions every year. And yet it could be corrected at once with ease, and little expense. Cut off the houses from the sewers. Use the sewers for nothing but surface water; and in short adopt the same system that they have in this beautiful city of Mars.

To show the difference of treatment to which we were now subjected we were invited now to live at a private house in the family of one of the officers of the government, one evidently high in position. We were glad of this opportunity for instruction and observation. The house was not in the centre of the city, but near its outskirts, and at the sides and back had a large garden. The reader, in my relation of our experiences, will be struck as to the resemblance of much of life to things in the world, as well as a difference sometimes which may appear incredible, and as this is intended to be a correct narrative, and not one to excite the wonder or the interest of the reader, facts will be strictly adhered to.

We were driven to the house with all our luggage. We had no sooner gotten into the house than I felt a degree of surprise and disappointment. It was no palace, and I had imagined that, owing to the high position of our entertainer, we should see the court life of this country. We were ushered from the hall to a reception room, and so familiar did it all look that we might as well have been back in Austria, but it was a beautiful art house, if I may use the term as applied to a house in good

taste. In the centre, the family were all assembled to receive us. The proprietor, his wife, two grown up daughters, a grown up son and two children. A little girl about eight years of age apparently, and a boy about ten years old. These people were all cheerful looking, and the lady and the gentleman himself gave us an open-handed welcome, such as made us feel really that they were friends.

"Come to our house and make this a home after your many and strange adventures. We surely can mutually interest each other. You can tell us about your strange world, and we can tell you about travels in our own."

It was not long before we were snugly ensconced in our new quarters. We had three rooms. On each side of a sitting room, a bed chamber overlooking a lovely garden. The simplicity and beauty of this house was something striking, and if I had been at home I should have called it old-fashioned. Rooms on each side of a wide hall, which was in the centre. Each room with open fire places, and the hall wide enough for side sofas and a fire place. The floors of wood inlaid with pictures and pretty borders, with rugs and skins of wild animals. The walls and ceilings wainscotted. The open fire places were ornamented with pictured tiles around them, handsomely carved wooden mantels, paneled pictures above and a few side shelves. Our sitting room was just so finished with a lovely, pure looking and homelike open fire place; no carpets.

Said I to the Count, "It is owing to the climate that they dispense with carpets."

"No," he replied, "it is for the sake of cleanliness and health."

"We Americans would be loath," I replied, "to give up our carpets; and I do not see how they can be unhealthy."

"In several ways," replied the Count. "They emit a fine impalpable dust which will often occasion, if not kept up, a

cough. They soften the feet and muscles of the legs, and unfit women who are in the house a great deal for walking. In the winter they are too warm to the feet for health, especially for a change from the warm floor to ice or ground that is cold. The Rosicrucians are health students, and they know that there can be such a thing as too much comfort, as the English call it, and yet I do not believe in people exposing themselves merely for the sake of hardening themselves. Rugs at convenient places can be made to take the place of carpets, and a beautiful floor is more artistic. But however this may be in the Earth, the sanitary question will be settled by the fact that carpets are no longer fashionable. This will enable many a father to give his daughter a better portion or outfit upon marriage. It is wonderful how much in the world, health, wealth and the economics go together."

About the time we had unpacked our trunks, we were summoned to dinner by the proprietor's eldest son, who escorted us to the dining room, which was immediately back of the reception room. Here we had chairs, tables, glasses, things like the Earth, very much to our surprise, which I in vain tried to account for philosophically; the only difference was I noticed that everything was more or less ornate, manufactured with an eye to the beautiful. The colors were bright and harmonious, more with an eye to the cheerful than dark and rich. This I also admired, I think it makes life more pleasant and beautiful, and were not the Pompeians right in this taste, and are not the English and Americans, with their rich but sombre tints, entirely wrong? We were seated alongside of the host and hostess, who for familiarity I shall call by classical names, the sound of which on Earth will be much more familiar. At each end of the table stood two beautiful girls, about 16 years of age, who certainly did not look like servants, but they were the waitresses at the table.

Dishes were served separately and slowly, first meats and then vegetables. The taste was not like what I was familiar with, but yet was palatable. The meats reminded me of larded bears' meat. The vegetables were savoury, and some of them stimulating. Whether this was owing to the seasoning or to the quality I could not tell, but I should judge the latter quality. All at the table were cheerful, and conversation flowed easily and without embarrassment, so far as our knowledge of the language permitted, and this knowledge was improving every day. We were asked about our manner of eating, and when we explained how similar it was to their own, they expressed great astonishment.

Count: "It is questionable in my mind if in many of the fixed stars there are not worlds similar to Mars and the Earth. Stereopticon analysis proves that they are composed of the same elements or substances, and why not out of the same elements and substances should there not come the same things, with some modifications of course; perhaps not much greater than we will discover to exist between different climates or countries upon Earth."

Archos: "Or perhaps in different geological periods or ages in civilization? We have an authentic knowledge of our history for two hundred thousand years. How long can you date back events upon the Earth?"

Count: "Some nations pretend for thirty thousand years, but in reality not over six thousand years."

Archos: "In Mars our history extends back so far that there is scarcely an experience in government, or education or life, that can come up, that we cannot go to our archives and turn back the leaves of history and find that it is only a repetition of what has previously taken place."

The young people listened with respectful silence, and young Archos remarked, "It would be a curious thing if we,

being the older world of the two, should find that the Earth had only repeated the experience of Mars."

Count: "And is all this wisdom kept in such system as to be accessible?"

Archos: "Quite accessible. You first go to the catalogues and then the books. The catalogues are continued each year, or rather indexes they might be called. Have you ever done such a thing on Earth?"

Count: "To a certain extent, but not fully, or in this particular manner."

We were both, I am certain, simultaneously seized with the desire to visit the archives.

Count: "Then you have solved the problems of all life experiences?"

Archos: "Not yet, we are all the time learning or think we are, which is what much of our wisdom amounts to."

We continued to notice the two young women who were waiting upon us. They were graceful as fawns. As beautiful in form as Venus herself; and they and the family were upon such terms that it seemed impossible they could be servants. I ventured the remark, "You are fortunate in having such attentive and excellent servants."

Isole, wife of Archos: "These ladies are not servants; they are apprentices, and they are daughters of our most personal friends. On our planet, besides an education such as will enable a woman to make a living for herself and family, if necessary, and to assist her husband in various ways, there is a practical training that every young woman goes through, commencing with cookery, and learning every branch of household work."

This made me think of the education of the daughters of the Queen of England, and also of these young ladies who take lessons in cookery and other domestic arts at the Kensington

Museum. I could not help exclaiming to myself, what a blessing this must be to Mars. How much misery I have seen in my own country arising from the want of any knowledge or training upon the part of young ladies to direct servants, or to keep house in any way or to put their hands to anything or even help themselves if necessary. Under such circumstances, the family cannot be a success, and life itself is a failure.

The lady continued: "This is necessary as every young lady is married by the time she is twenty years old, and is expected to take charge of her own house."

"Every young woman married," replied the Count. "How do you bring that about?"

"How," replied Isole with a twinkle in her eye. "By marrying them to the young men."

"Then every young man has to be married?"

"Certainly, before he is twenty-four years old."

Archos: "What madam says is strictly true. This is a part of our law and social custom."

"What if they refuse?"

"We make warriors of them. Send them to the front to fight the wild beasts. We need soldiers in great numbers for this purpose."

"You do not make warriors of the women?"

"Certainly. They prepare all the snares and traps, and invent stratagems, and work in the hospitals. They often marry before they are killed off, and then return home."

This all struck me as being the height of madness and cruelty, and I pitied the people of Mars. In my sentiments and prejudices I had become a confirmed bachelor.

"What about the means of support?" said the Count.

"Means of support?" replied the lady with a look of astonishment, "Explain yourself."

"Do they get married with nothing to live upon," said the Count.

"Certainly not," replied the lady. "We all have something to live upon; everybody."

"In what way?" said the Count.

"The general inheritance," said Isole, "starts every one in life, and after that they depend upon the skill in arts which they have acquired in their education."

The Count looked more puzzled than ever, and I felt so.

Archos: "Not being acquainted with our institutions you may not understand what Isole means. In our country all children, male and female, are educated and trained mentally and physically, industrially to a knowledge of certain arts. This makes their labor valuable. All are entitled to certain property and means upon which to start life from the public domain and treasury."

"Do you mean the rich and the poor?" replied the Count.

"We mean the rich and the poor," said the Marsian with a smile.

"Where does your Government get the property?" was the practical question of the Count.

"Inherits it," replied the Marsian with a smile.

"From unclaimed estates?" asked the Count.

"There is no such thing as unclaimed estates. The Government inherits all property upon the death of the owners, excepting portraits and statues which may be considered heirlooms."

"You mean to say all property, real, personal, and mixed as the lawyers of the Earth say?"

"Yes, of all property, with the exceptions mentioned."

"What do they do with it?" asked the Count.

"Support our schools, our public libraries, our galleries of art; maintain our roads, our post offices, our judiciary. Our army; endow our boys and girls who marry with a home and

means to start a business. Support the old and infirm and disabled from all causes."

"Do you mean to say," replied the Count, "that what a man accumulates in business is not his own?"

"Yes, up to the extent of a large fortune" (a sum was mentioned equivalent to a hundred thousand dollars), "but no more, and no man is allowed to hold real estate which he does not occupy for a residence, store, manufactory or farm."

"After he makes more than the hundred thousand dollars, what does he do with it?"

"He pays it into the public treasury. There are accountants who receive returns each year from people. Those who accumulate and pay into the treasury are reckoned public benefactors. After paying a certain sum they have a right to establish some public institution. They also have erected to them a public statue, and at our public games they have a right to wear a crown of oak leaves."

"I now begin to account for the great number of beautiful statues which makes your city look like Athens in the age of Pericles."

"And after they have accumulated a hundred thousand dollars, and they begin to pay into the public treasury, do they continue to be industrious?"

"Quite the same," replied Archos, "Only that their notions appear to enlarge, and become grand. The sordid part appears to die, and the humane and public spirited to grow, and enlarge and become grand. It is a noble thing for men to work for the good of humanity, true glory in its real sense, far better than to continue their pursuits with sordid motives, to the end of their days."

Light began to gleam upon my mind. The Count looked pleased.

"Are the taxes heavy?" replied the Count.

"I understand what you mean," replied Archos, "from my historical studies, in the Archives of my own country, but can reply that there are no taxes."

"No taxes whatever?" asked the Count.

"None whatever," replied Archos. "They are all defrayed out of the public inheritances, and what is paid into the treasury by the working rich. I understand your surprise from the lessons of our history, but I assure you we have solved in Mars many of the problems of life, government and education. In fact, government and human life with us run together harmoniously and by conforming closely to the laws of nature, the rights of humanity and common justice, government carries itself along as naturally as the fruit tree blossoms, grows, and drops its fruit.

The old law of inheritance was the most difficult to overcome, as it was founded upon the idea or prejudice that children have a right to the property of their parents, but in truth, they have no natural right. That order only should be followed which is for the good of the parents, the children and the state. In ages past, when our laws of inheritance were different, and when all went for some hundreds of years to the eldest son, and afterwards to all the children, share and share alike, it was found that the pure natural affection of the child was sometimes corrupted by sordid influences, and frequently there was most disgraceful litigation over the property at the death of a parent. They appeared sometimes to be as bad as a lot of vultures ready not only to devour all that was left, but even destroy the good name of a father to accomplish their purposes. It was also found, that the prospect of wealth without labor made idle children, and sometimes those worthless, who otherwise might have been valuable and happy citizens. Consideration therefore for the welfare of all parties and that of the Commonwealth induced the change and it has been found to work most happily."

"I fear that the members of that most eminent of all legal professions, the law, must fare badly in Mars."

"There is little law and few lawyers and they are all paid a fixed salary by the state and never allowed to take private fees. The lawyers are our peacemakers."

Verily my astonishment increased. I said to myself is this Marsian mad or not. I rather suspected that when we came to the real facts we would not find it all the color of rose. During all this time dinner was progressing, and as one dish after the other was brought, I confess that I enjoyed them. Alongside of me sat the young lady with whom I had had no opportunity of conversation. Her grace and beauty were something which, to the eye, were overpowering. A palpitation of the heart seized upon me at once. I do not mean love, but a palpitation of the heart. I presume that the reader sometimes in life has experienced it. Her eyes were full, blue, liquid and mild. Features regular and beautiful, dimples on chin and cheeks. A profusion of bright golden hair, gathered in a simple knot behind, complexion fair; teeth like pearls; manner quiet, easy and graceful and natural. Nothing coquettish, looked full in my eye as much as to say, I have nothing to be ashamed of, or to conceal. Her form was beautiful; fine falling shoulders and neck graceful as a swan; head of medium size, full chest and rounded figure. Her hands were covered with pretty dimples. She had a soft voice, but I could not judge of her conversation as there was a breathless attention paid to that which was going on between the Count and the father. I could not determine as to what they made of us. Our inferior appearance and figures and lack of the peculiar dignity and charm which these people possessed must have placed us at some disadvantage. Of the two, the Count more nearly approached it.

The young man who sat opposite to me was a fine specimen of manly beauty. He could have stood for the Apollo Belvidere, without disparagement.

For the art lover's sake, I must say something of the table furniture. There was no cloth but the table was composed of different woods, beautifully inlaid in small geometrical figures.

The service was partly of gold and partly of glass and porcelain. The glass was not cut, but apparently blown and moulded, and was of various forms, shapes and colors, something like the glass of Meran or old Venetian; and some colored like the old Greek glass found in the Isle of Cypress. Also iridescent. It looked as though the light and the colors of the rising and the setting sun had been brought into requisition. This glass I ascertained was all malleable.

The dishes were like Sevres, but superior to it and painted, some in fruits and flowers. Some in historical figures and some marine. In the centre of the table there were dishes supported by little cherubs which had a delightful effect.

When fish was brought in the dishes were all decorated with marine animals, plants or scenes.

When the fruit was brought, they were decorated with flowers and fruits.

The two young apprentices did the waiting. Instead of finger bowls, they handed around in a basin wet towels perfumed to wipe our hands and mouths upon, and then gave us each a dry towel. We had no tea, coffee or spirits, but a hot drink which looked and tasted like milk, but which was said to be the juice of a plant. It was not intoxicating, or stimulating; what it was taken for in any worldly sense, I could not imagine. We then retired to another room, where we had lounges. Ladies and all, and what was my surprise to suddenly hear a burst of music and see come tripping some beautiful young dancers of both

sexes. Some with reeds or flutes, some with cymbals, and some using only their voices. They went through the most beautiful and graceful motions. The dancing was perfectly modest but it was entrancing to the senses. This whole time I could not keep my eyes off the charming daughters of our hostess, so perfectly fascinating in their beauty and every movement.

From hints previously given, some conception may be formed of the style of decoration of this room. The floor was laid in mosaics and in the centre was a small fountain which played perfumed water. The ceiling was frescoed in figures of cherubs and girls, and so natural was this done, that as I looked up from my lounge I was startled at the figure of a laughing girl, painted to imitate the action of throwing herself right in my arms.

The dancing and music were kept up for at least a half hour, when the revelers retired. To a question I was informed these dancers and musicians were neighbors' children, friends of the family, who came in to entertain the strangers. That all children were taught music and dancing from infancy, and that it was a part of the recreation of every day in order to inspire buoyancy of feeling and cheerfulness and improve their physical beauty.

After they had retired, all of the young people entertained us with songs accompanied by an instrument like the harp. We whiled away the evening in pleasant conversation, but as the reader has been prosed enough for the present, I shall stop to relate a hunt, one of the most extraordinary, wonderful things I ever have witnessed.

Chapter IV

Detailed descriptions in full and at once, must not be expected in this veracious history, as it is easier and much more pleasant to pick up the information as we go along to the extent of what is necessary to a clear understanding of our movements.

I will mention, however, that the city we were living in was a place of about three hundred thousand people. That it was inland perhaps twenty miles from the sea. The name of the city indicated hope; we will call it *Esperanza*. It was many thousands of years old, and was founded upon advanced principles of social science at its origin, which principles had come to pervade the whole country. It was the seat of government, and it was very singular that we should have lighted here in the first place. The reader must not expect me to go into the subject of the system of government, and the various institutions and religious belief of the Marsians at once, but they will be taken up as we go along, and in that way there will be less dry detail, and the reader will naturally, as it were, come by all the information himself.

I have described how armed soldiers stood up on the top of towers, upon the lookout as it were, and how they always accompanied both land and aerial carriages. I found that the Marsians had terrible enemies in nature; worse than anything known to us upon Earth and approaching in resemblance to the fabled monsters of the early period of the world. I learned that the most terrible of all these monsters was a flying gorilla, of large size, fully that of a man, with immense wings, and four hands or feet, whichever they might be called. They inhabited the forests and caves in distant mountains and frequently made attacks upon settlements and farms, and even upon cities, carrying off women and children. Sometimes these attacks would be made singly, and sometimes in numbers. They carried clubs and

shields, and possessed a high degree of intelligence, altogether different from the human of course, not equal to it. They were robbers and cruel and the human beings upon the planet of Mars never could reach their fastnesses owing to the tracts of country inhabited by other kinds of ferocious beasts, such as we have no idea on Earth, but of which some conception may be formed from what has been mentioned at our first encounter with the wild beasts of the amphitheatre; though from our subsequent acquaintance we soon found that these were by no means the worst. My curiosity was now greatly aroused, both to try the flying machine and to experiment upon these ferocious monsters with our fire arms and to see a phase of life in this strange planet entirely new to me.

The Count had investigated the means whereby the chariot was elevated in the air. It was done by filling a large compartment of it with a light gas. The birds about the size of ostriches were attached to it, and they were guided by reins and propelled it through the air. These man-eating monsters never attacked the birds, but only the men in these aerial chariots, and by flying into the interior a certain distance there was always a certainty of being attacked and by going far enough we were sure to meet with any number. Their use of shields convinced me that they possessed reasoning powers beyond any animals upon the Earth except man.

The next morning a large chariot was in the courtyard of our residence, with the trained birds, which were so tame that they delighted in being petted, and would reciprocate the attention by the fondest manifestations. Our party consisted of our host, the Count, myself, four soldiers and the driver. We were armed with rifles carrying one-ounce balls. We also carried a small breach-loading swivel loaded with musket balls, like grape or canister, to fire in a crowd. The wonderful buoyancy

of the gas that would elevate a party and accoutrements of this weight may be imagined. Under the feet of the driver was a little box or machine, which regulated the gas. By pressing with one foot, combinations were made which resulted in more gas. By pressing another foot, it was allowed to escape at the back end of the chariot or air ship. It was astonishing with what ease and rapidity we could ascend and descend. When we were prepared to start, the entire family was on hand to see us off, ladies and all. As the wife and children looked upon the father going off with us, I could see that there was a struggle between the feelings of the heart and the soul that attempted to conquer them. They did not cry, but they looked through tears. The soul conquered. They assumed cheerfulness, though they must have feared for our safety. The driver gave a low whistle, the birds lifted their heads and we began to rise and soon as we were clear of the buildings, the birds began to fly in the direction they were urged. As we mounted in high air, we could see the beautiful city lying under us, and in the distance the sea, covered with its white caps, and the deep bellowing roar of which could often be heard in Esperanza. On the other side in the interior at a great distance were mountains of an immense altitude, glistening with their snow caps and vast glaciers. Underneath us were beautiful farms, as we sped towards the mountains. It was away off in the country beyond these serrated ridges and mighty peaks. Before we reached these mountains, we came to a great wall, with battlements and towers, at the distance of a half mile apart. I could see the line running far as the eye could reach. I was informed that this wall had been built at vast labor to protect the neighboring plains from the attacks of wild beasts. What fearful enemies the Marsians have overcome! A constant outlook was kept for some of these monsters, but none of them appeared. I was informed that months frequently passed without

one of them being seen in the neighborhood. As we approached the mountains, all nature assumed an aspect truly terrific. We floated down within a few feet of the tops of the trees. Great caves yawned with open mouths in the hillsides. Dark and deep gorges with torrents of water falling and thundering into an abyss. Animals of enormous size and ferocious aspect would make their appearance. How it was possible for ordinary human beings to contend against them, I could not imagine.

I saw apes much larger than men, running about the trees. Serpents forty and fifty feet long basking in the sun. The probability was that we would have to find some place to pass the night and rest our birds; where would it be? True we could improvise our chariot into a fortification, but the appearance of such strange monsters was unusual to me. Their roars were hideous, and it puzzled me how they lived. They were in such numbers.

We gradually left the limit of vegetation and rose up with nothing under us, but vast rocks. Rocks piled upon rocks. Peaks of rocks rising one above another like steps to heaven, until lost in ice and clouds. Up, up we went, our birds clearing the air and urging our chariot fully fifty miles an hour. The cold wind blew sharply in our faces, but such was the excitement we scarcely felt the cold. We soon found ourselves at an altitude, that there was nothing but clouds beneath us. Onward we sped, as it were, in the face of the sun which was bathing in light the clouds beneath us, and making of them a rolling ocean of gold. We now had passed these mountains and come to another valley which was protected by a vast wall. It was covered with farms and beautiful villages. Onward we sped and crossed this valley to other mountains, wider but less terrific than before.

We noticed that we were reaching a region of nothing but rocks and mountains too steep, too rocky for human habitation. I heard a soldier on the watch give a sudden note of alarm; he

pointed in the distant heavens to a speck which I would have taken to have been nothing but a bird. The object came nearer to us, and then flew away towards its own fastness.

"That is to give an alarm," said Archos. "We are now near the borders of the land of the monsters; we will venture no farther, but wait." We landed on the ground a few moments, where we saw no beasts. Several of the monsters were now in the distance, reconnoitering. After giving the birds a slight rest and feed, we again rose in the air. By this time there were eight or ten in the air, and as Archos said, preparing to attack us. Our point was to fire upon them so fast that they could not reach us. I was informed that they always came together upon an attack. The Marsians had a terrible hatred against these monsters, owing to their being man-eaters, and carrying away their women and children. So powerful were they that the Marsians had never been strong enough to extirpate them, and for long ages with all their civilization, they had been subject to terrors of which upon the Earth, we comparatively know nothing.

The reason the attack was invited in the air, instead of upon firm land, was that we did not intend to venture too far, where we would probably meet great numbers, and desired to try the experiment of this aerial battle with a view to future expeditions upon a large scale in the event of it being a success. When they were within a mile of us, I could get a clearly defined view of them through my glass. I shall never forget the amazement of the Count. These monsters were apparently eight feet long with very much of the human look. They had immense wings, which were of long hair and skin, in no wise attached to arms or legs. Their bodies were covered with long coarse hair. Their heads were large and round, with shaggy hair growing on top. Their eyes were deep set and mouths very wide and lips parted from their teeth. They had immense arms, and in these arms

carried clubs. I could see also, that they had tails which in flying appeared to facilitate their steering.

There was something in the mere sight of them that made my blood boil with some undefined instinct to destroy them. We halted our aerial ship and the Count requested the privilege of a first shot. He sighted the foremost with his repeating rifle, carrying a two-ounce explosive ball. I wish to say for the Count, as well as myself, that no people can feel a greater repugnance to the use of explosive balls than we, but when we saw the odds that the Marsians had to contend against, we felt that it was humane to use them against such beasts, in the defence of men, women and the dear children.

These creatures were not coming in full speed; they had evidently been surprised at our coolness in waiting for them. The Count set his fatal eye when sighting an object upon the foremost and fired. He struck him in the head and the ball exploded with frightful effect, away he went head foremost to the Earth, like a piece of lead. Crack went the Count's rifle again with the same effect. Again cracked the rifle with the same effect. The monsters were struck with consternation. They went diving after their companions evidently to see what was the matter. The Count then gave the word for a general fire to strike them before they reached the ground. This fire produced a fluttering, a swerving and a sort of general fall. We started our coach to a point immediately over the spot where they fell, and there we saw them mostly lying dead, with one or two running from one to the other, making lamentable noises. Those we soon settled in a way similar to the others. We then, after cautiously looking around for wild beasts, decided to land and examine these monsters. They were scattered over the plain, stone dead, excepting one, which was so badly wounded, that he could not stir but made frightful noises.

It is impossible to convey any idea of the terrific face of this beast, and the anger that flashed from his eyes. We went near him to take a good view with our revolvers in our hands, and protected by the Marsians, whose rifles covered him for fear that he might make a supreme effort for mischief. But his power of mischief was gone; with a fierce look cast upon us, and a cry that sounded like a curse, he fell back dead. When we came to examine these brawny monsters, we were more astonished than ever. Their arms were fully as muscular as those of the grizzly bear, and the rest of their bodies in the same proportion. Their clubs must have weighed at least a hundred pounds. Their heads were of an enormous size, and covered with shaggy hair and a tuft growing on top. We scalped the tufts for trophies and dragged one of the monstrous bodies on board of our car, as the Count wanted to dissect it. By this time, we saw away off through the atmosphere several dark spots, and knew it was the enemy. We had no particular desire for another fight, as we had tried our experiments, and wanted to return home with our trophies, so we mounted at once. When we were high in the air we saw them coming from different quarters, but apparently making for the spot where their friends had fallen. It was not long before at least fifty had congregated around them. We could see them turning them over and over, as it were, in wonderment. Shortly a long dark object emerged from a neighboring wood, and made a sudden dash upon one of the bodies, which it attempted to carry off. The monsters suddenly rose in the air and attacked the beast with clubs. The noise brought other beasts to the field, and a terrific battle ensued for the dead bodies. The monsters confined themselves to clubbing the beasts on the head from above, and killed a number of them, but finally the attacking force became too strong and devoured the bodies. Then a howl went up which

we could hear at the distance of several miles. They then made a straight line for us. We decided to retreat rapidly as possible, both to get away and to afford us more time to fire upon them from a distance.

It was not long before we could see that no speed we possessed would be a defence, and that we had better scatter them as rapidly as possible. The plan was then arranged that the Count should fire upon the nearest, myself upon the next nearest and the rest upon the others, and that no fire should be given without taking certain aim. Soon as the nearest approached, the Count dropped him, and at this they all gave a terrific howl. I dropped the next at the same instant. They were now all fairly within range, and the Marsians fired with deadly effect, with their repeaters, but nothing could equal the accuracy and rapidity of the firing of the Count. Before this crowd could reach us, they were all dropped, and we could hear below the battle of the wild beasts over their bodies. We noticed now, however, many dark specks upon the sky. In some way an alarm must have been given. We saw three separate companies coming for us. Archos suggested that we had better throw the body over, of the dead monster in our car, as probably this was what was attracting their ferocious attention.

The Count knowing that he could get others in time, assented and over it was thrown. The hair upon it emitted a strong pungent odor. But there was not much time left to consider such matters. We saw them coming in three separate squadrons, and seeing that we were flying away from them, they did not stop to look after the remains of their comrades whose bodies were now being fought over by the wild beasts of the woods. On they came, and I was now concerned on account of the odds being very much against us, and knowing that these must be terrible creatures at close quarters, with their mighty arms, legs

and wings, with all of which they doubtless fought, and their tremendous clubs. We at once divided our marksmen to attend to each squadron, with injunctions to fire rapidly, but never so fast as to lose correct aim. In a few minutes when they came within range down went the leaders, and besides the explosive balls had a startling effect. At the next fire we noticed a number fall and besides this, that several were wounded and trying to keep up. This delayed two of the squadrons much to our satisfaction as they all collected around those that tried to keep up and appeared to be attempting to render them assistance, but finally down they had to go. When they got within a half mile of us, the three squadrons joined together, when we observed the same system in firing as heretofore, but we saw some more specks in the distant sky. Our birds with their mighty wings were speeding along with all their power. Our firing was very rapid, and before they reached us, they had nearly all been dropped, and there were only three or four that got near us. Never will I forget their ferocious looks. We had been firing very rapidly, but nevertheless, their numbers were so great, that these monsters came to close quarters. One of them grabbed a soldier and pulled him out of the car, and by this time, the others had received our fire and one fellow actually rolled into the car, and before he died he wounded one man by snapping his foot off. The attention of all of us was now turned toward the soldier whom the monster was attempting to carry off. Whether he was alive or dead we could not tell, but we were determined to save him if possible. We left him in the hands of the Count. The first thing he did was to wing him so as to drop him slowly. We then dropped our machine as rapidly as possible. The point with the Count was to kill the monster soon as he touched the ground. This was the only chance of saving the noble soldier in case he should be alive. We watched the result. Bang went

the rifle of the Count. The monster released his hold upon the soldier and fell back; we at once went up to the soldier who was apparently dead, and lifted him in the car. We soon found out that he was not dead, but stunned. In a few minutes he revived. His flesh was lacerated by the claws of the monster, but otherwise he had sustained no injury. The wounded leg of the other man was dressed at once, without interfering with our proceedings, which consisted simply of getting away as rapidly as possible. We had made considerable progress upon our homeward return when we saw another squadron in the distance. The fight was the same with this difference, that several of the beasts who lived to get near enough, perhaps despairing that they should reach us, threw their clubs. They did not strike any of the soldiers; but struck our birds. They were aimed at us. They struck them upon their backs and did not kill them, but injured them, so much so, that we were compelled to descend with them. This was in a degree calamitous as we had already passed the mountain barriers, and were over the forest of wild beasts. The monsters, however, had disappeared, and we had not two enemies to contend against at the same time.

In descending we selected ground that was somewhat rocky and from which there was a gentle descent from all sides. We had no sooner touched the Earth than every man was set to work building a stone wall of considerable thickness. The object of this was to enclose the birds in order to protect them from injury until they died or could be sent for, if they did not recover.

I will state that the affection of the people for all birds or animals is something remarkable and appears to be fully returned. Whether the animals are more intelligent or whether this treatment has caused so good an understanding, I leave the reader to conjecture. The Marsians believe that animals have souls and that they will meet them in the next world. This doctrine has been

held by some of the greatest men on Earth, Wesley, the founder of Methodism, among others. But to continue, we all joined in the work, but the physical strength of the Count and myself was nothing in comparison to the Marsians. It was marvelous how accurately they selected the stones, and with what rapidity they laid them. They had the art of laying the wall in such manner, that the stone could not be pulled from the outside. The Count stood on top of the chariot with his rifle in hand. The wounded soldier, notwithstanding the pain he endured, acted also as a watch, with a rifle in hand. How he could do this after so terrible a wound, is more than I can understand, but I account for it in his excellent treatment, and the effect of restoratives which were used. As it was, the wall rapidly progressed around us, and everything was going on well, when suddenly there was an alarm from the wounded soldier. He pointed to an object a quarter of a mile distant. At first we saw nothing, but soon there emerged from behind an immense rock of vast size, what might be called a dragon. Half animal, half serpent. It was at least forty feet long. Shaped like a crocodile, only more slender in proportion to its length, with eight or ten legs and a very wide head. This was a sight to make the stoutest heart quail.

When he saw us, he gave a loud bellow and moved towards us. He could not leap, but could run very fast. The Marsians all covered him with their arms, waiting for the signal. The Count did not fire when he was first seen, as he wanted the benefit of an observation upon so strange a beast; but soon as he moved toward us, he gave him the benefit of one of his head certain shots, direct in the head. The ball hit him between the eyes, and exploded scattering a portion of his head in all directions blinding him. The creature gave a terrific roar, and commenced rolling his body in different directions, as though in anger and pain, but without any definite object. He would throw his tail

in the air fifty feet high, rolling over and over, and emitted a most disagreeable odor. The Count to prevent this gave him another shot in his back, which disabled him.

The Marsians now redoubled their work as they said the scent of blood would bring around other beasts, and sure enough it did. Whilst this beast was thrashing wildly around, four or five of such animals as we had killed in the amphitheatre of Esperanza came upon the scene and attacked it. Tearing it in pieces and feeding voraciously, and whilst this was doing the Marsians worked upon their wall. There was food enough, and the wild beasts were so busy that they did not attack us so long as they were not too numerous. When there were too many of them, we opened a fire and our explosive balls would fatally wound them. They were so unacquainted with gunpowder, that when we fired, they did not realize that we were the attacking party, but immediately fell upon their wounded companions. In the meantime, we continued our work.

There now arose a mighty storm in the mountains. It darkened over very suddenly and the peals of thunder were terrific. The lightning would flash and leap as it were from rock to rock, whilst these wild beasts were fighting and rending their prey, and we were quietly at work. Night had set in, and with it the number of animals in the forest and among the caves increased. Their horrid roars, intermingled with thunder, were fearful. The darkness was attended with this disadvantage. It compelled us to work in the dark, and brought the beasts too near our enclosure.

As the flash of the lightning would reveal them near us, they would be shot, when a terrific combat would commence over the wounded. We finally had to cease work, and there we had to remain in hopes that the birds would be equal to a flight in the morning.

The storm passed over and we could hear the mountain torrents thundering their way along upon all sides of us, and the wild beasts continued to collect. I did not see the least sign of a loss of firmness or fortitude upon the part of any one in this dire calamity. We would occasionally flash out a light from the burning metals, kept on purpose, something like magnesian lights, and this would give us an opportunity of firing upon the animals, and thus keeping them engaged with each other instead of trying to mount and attack our enclosure, but they drew nearer and nearer, until the frightful battle came immediately under our walls.

At length the sun began to gild the distant mountain tops, for which I fervently thanked God. We fed and watered our birds and they attempted to rise, but they could not fly. We then decided to leave them there, and trust to the currents of air as the wind was blowing in our favor. We found our machines slightly out of order and were balked in this attempt. Each one of the Marsians appeared to be an expert mechanic, and chemist, and two men were set to work to repair the machine if possible, whilst we continued the fighting. I confess that the number of wild and dangerous beasts upon Mars was something astonishing, and it seemed impossible for me to conceive how under the circumstances, the human family had not been extirpated. Whilst we were engaged in these repairs, and keeping back the press upon us of the largest and most ferocious monsters the eye ever witnessed, we cast our eyes up to the sky, and saw a speck which denoted that our man-eating enemy was coming after us. These would certainly not be diverted from the attack, and I was informed that upon land they were more formidable than in the air. The dragons, such as the first we killed, were now coming in the field, and we witnessed several battles over carcasses. The dragon would strike a tremendous

blow with his tail, which, if he got in, was certain death, or he would bring his jaws down upon an animal. The other beasts would try and get under the dragon's belly, and scratch out his entrails. Whilst this was going on, we were watching for our old friends, who came steadily on. We now trained the small piece of artillery we had brought with us upon a pack of wild beasts that had just poured over a neighboring hill. They were about the size of leopards, but looked like wolves, were it not for their enormous size and their heads were much larger. We loaded the piece with explosive balls and it made a great havoc and this in some degree changed the scene of battle.

By this time the man-eating monsters were in range, and we commenced dropping them, and when they were near enough we suddenly turned the piece of artillery upon them. We brought them all down, at least twenty or thirty, but some of them were only wounded and now tried to pull our entrenchments to pieces and climb upon us. This at once brought the wild beasts upon them, when we witnessed a terrific fight between these monsters and the beasts. We had no previous conception of their strength. I saw one of them take a sort of monstrous leopard and pull his ponderous jaws apart a la Hercules, but they were all wounded, and we killed them off fast as possible, for our own protection.

In the midst of the fight it was announced that our machine or flying vessel was repaired. Archos and the Marsians bid an affectionate farewell to the birds, promising to send for them, which I thought they understood, and our chariot rose gracefully in the air, and we were soon above this scene of awful strife. What would have been the consequences if we had got out of ammunition, it was too dreadful to think of. But we had enough, we came provided for dangers, and we met them sure enough. We had hopes that the beasts would not or could not

break into the enclosure, that the birds would be saved, by ultimately being able to fly home, or being rescued by a strong party that we would send after them. We left them plenty of food and water, with which we had also come well provided.

In that dreadful night after our chariot was disabled, any loss of courage or fortitude would have been attended with our immediate destruction. Is it not so in many of the emergencies of life? Did the Romans not show their wisdom by creating temples to fortitude? We now had to confront the danger of the elements. The danger of being blown to sea, of being blown among enemies, of being compelled to land in the midst of great dangers. But we were sure that we would do our best. As I said before, the wind was favorable and we floated gently upon our course. The wounded soldiers were laid in the bottom of our carriage and put to sleep by the use of an anodyne. We had come with a supply of medicines and surgical instruments. We were gently borne by the wind at the rate of about ten miles an hour at first, but commencing to blow briskly on our rising to a greater height, we were soon carried at double that rate, or more, per hour. Soon as we reached civilization, we landed near what they called a rapid transit station. This would give us conveyance direct to Esperanza and get us there in a very short time. I saw no railroad, and I could not imagine what kind of transit we were to have. We stopped however at a capacious building surrounded by all kinds of vehicles and upon entering it found myself in a place which reminded me of a railroad station, though there was no smoke or noise. I learned that it was an underground atmospheric road. Our chariot and other articles were packed in a compartment in a few minutes. The chariot was so made that it could be taken apart more readily than a common carriage. The officials were most polite and highly esteeming of Archos, and having heard of us it was

wonderful with what alacrity everything was done. I afterwards ascertained that this was the habit of all the officials in Mars. We were soon on board. We were carried in tubes eight feet in diameter, which was very spacious, and they were comfortably fitted up, though I noticed that the Marsians never attempted to make parlors of such places, not considering such a style appropriate. We were a hundred and fifty miles distant from Esperanza and what astonished me was we traversed the entire distance in less than an hour. The car was brilliantly lighted by electricity and the motion was so smooth as to be scarcely noticeable.

Upon landing, our wounded soldiers were sent to the hospital and we were quietly driven home. I shall here state that no publicity was given to the hunt we had just returned from. No boastful noise and preparation made, and the general world did not know where we had been. But we had demonstrated the practicability of enlarging the area of civilization, of protecting the homes of the Marsians from the most horrible of dangers, that had always threatened them day and night, and of waging a war of extermination upon the man-eating monsters and wild beasts.

Chapter V

When we returned, the family of Archos received us in the hall with demonstrations of the greatest delight. He immediately called a meeting of the Legislators in the grand amphitheatre, and the facts of the beasts and the battles we fought were laid before them. I was struck with the circumstance that the heroic Archos, before making a proposal which he had to make to this great council, had himself encountered dangers, risked his life, and entered into the first battle, and now produced the trophies of his victory. He proposed that the army, when supplied with fire arms, artillery and explosives, should move upon the entire region of country occupied by wild beasts and exterminate them. When they should fly to the caverns, that the entrances to them should be walled up. That a number of aerial machines should be specially made large enough to carry a long-range cannon, from which shells and canister could be fired, and that the territory of man-eating monsters should be invaded, and that as many as possible should be destroyed, and that women and children should be sought for in their fastnesses to find out if it were possible that any of them could be alive.

After a grateful rest of a day or two I received an invitation to accompany Isole, wife of Archos, and her family upon a pedestrian trip to a very lonely place in the mountains to visit some old works of art. Isole was an idealist passionately fond of the beautiful in nature—in pictures—statuary—architecture, and music. It ran like a sweet rhythm through her whole being. It was she who personally superintended the education of her children, particularly her daughters in these things, and also in their physical exercises; as like the other Marsians, she appeared to have as high an idea of the temple of the soul as the ancients upon Earth. Our party was composed of Isole, Ismene, Enone,

the youngest daughter whom I have not described, as she was absent upon a visit when I was at their home before, and Faunus the son.

Enone, comparing her to a maid of Earth, looked sixteen years old, not stout, but symmetrical, a perfect form. Her complexion was blond with a profusion of golden hair, not the yellow gold, but the color dashed with an alloy of red, and glossy, to such a degree that it appeared to shed rays of brightness around it. Her eye was a full hazel, and a laughing eye, brows arched. Forehead more broad than high, straight nose and well-formed mouth. A perfect Diana's bow. Her voice was musical and low, and in conversation she was ever dwelling upon pleasant things. Her step was elastic and graceful as that of a fawn. The reader may well surmise that I was pleased to be one of this party. I noticed that in estimating distance they calculated it not by miles but by time. So many hours, so many days; and they usually considered that they could walk at an easy gait without tiring. I expressed a great desire to see the manners and customs of the people as we walked along, and Isole promised me fully to gratify this curiosity. She said she had many acquaintances in all the different walks of life. Faunus was a lovely boy; active and of great animal spirits. He had a small but beautifully formed head, curly all over; a bright mobile face, and form and features like a young Adonis. The next morning I was up at sunrise. The skies were spread all over in a glow of red violet color.

Our party all met in the dining hall and had a breakfast of bread, fruit and milk, which I enjoyed very much. I wish here to state that the bread used in Mars was much more nourishing than that usually given you on Earth. The bran was simply taken from the hull of the grain and the rest of the grain all ground into the flour. This made darker bread than I had been accustomed to,

but it was much sweeter, lighter and more strengthening. After breakfast we quietly commenced our march in the sweet air of the morning; the birds singing, the party all in delightful spirits and expectancy. It pleased me to notice that from some cause, I was a welcome guest. The ladies were clad in short dresses, thick soled shoes, each had a little satchel by her side, which carried the few toilet articles absolutely necessary. Though we started upon a pedestrian trip of three or four days, it may be said that we travelled without baggage. It was in the suburbs where we lived, and passing out of the main thoroughfare, we soon got upon the handsome streets occupied by artisans, mechanics and others, whose avocations required them to go to the city every day. For this they had the benefit of rapid transit, consisting of underground atmospheric roads owned by the government, and upon which householders had free tickets. They came along in little parties singing songs; there was such a happiness about their looks that it was a great pleasure to meet them. Some were still at work upon the grounds surrounding their small holdings, men, women, and children. The houses were all of stone, and scarcely two alike. The outsides of all of them were more or less adorned with painting and statuary. A beautiful feature was that of training flowers and vines around the pictures upon the walls. There were many fountains also in front of their doors, with gold and silver fish swimming about in the basins. Some of these basins were large enough to have cultivated in them other varieties of fish, and thus supply the households. In front of some of the houses there would also be marble or stone troughs worked in pleasing designs, and leaning over it a beautiful statue of a female figure holding a pitcher, from which water was pouring into the trough; either this or some other form. These were for the accommodation of animals and pedestrians. I was anxious to go into one of these houses,

and Isole said she was pleased to be able to gratify me as she had a friend, a worker in bronze, whose family also knew her. We shortly stopped before a pretty house, and touched a little spring which brought a lovely young woman to the door steps; large steps which were covered and had seats on each side. We were invited in and found the family all at breakfast. There was no embarrassment upon our arrival but a cordial invitation to be seated and partake. This we could not do, but for politeness accepted some fruits. Their breakfast was similar to what our own had been, but I noticed a substantial addition of something like oatmeal porridge. I have noticed that the Marsians do not eat meat for breakfast. The artisan was a noble-looking specimen of human nature, and could see immediately that he was a highly educated man. He was very happy over a piece of work his son had brought from school the day before; a fine piece of wood carving, the bust of his lovely sister who had come to the door. It already had its place upon the wall. It was cut from solid wood, and as finely done as anything I had ever seen in Switzerland or the Tyrol. The artisan now excused himself as his time was up for going to work. Isole mentioned that I was a stranger and would like to see the house. The fond mother at once commenced describing the several virtues of the large family of children which I saw around the table, and described how much of the beauty of the house and its adornment were due to them. That the boys had made a great portion of the furniture at their schools; had frescoed the walls, which they had learned to do at school; had carved the beautiful brackets which I saw around the walls, excepting some which had been carved by the sister. The house had a wide hall, four rooms on the first floor, and four on the second, and the roof was utilized as a sort of garden and promenade. The flowers and vines upon the roof were in vases. There was a garden all around the house,

which was worked by all the family, including the sister. At the end of the garden was a small building used as a bath or rather natatorium. A swimming bath. The water for this purpose in the front yard was supplied by a beautiful fountain. It threw over into a reservoir, about 20 feet square where the fish were grown and used by the family, from thence to the reservoir which composed the bath. Hot water could be turned into this from faucets, running from the public mains. All this water was provided free, hot as well as cold. This introduction of hot water was accounted a very great convenience.

There were no woods painted, but much of it was carved, and worked in bas-relief; vines, flowers, and animals were profusely cut. In one room the boys had carved the wainscoting illustrating their father's art. The father had furnished the drawings. There were many lovely panel pictures on woods over the house. Everything betokened industry, intellectuality, art. I inquired if these houses were not inherited, what would become of the family decorations, but I was answered that upon the death of a father the widow retained the house, and after the widow, some of the children were always ready to take it, and the family of the last occupant was always preferred. By this means houses were known to remain in the same family for many generations. This cultivated the love of home, and families could not be deprived of their homes as there was no such thing as selling property for debt or to get money.

I wish to here state, parenthetically, that I am by no means responsible for the ideas of people who live in Mars, or the way they live. Of course, their ideas of property are all wrong and the old feudal ideas of Earth must be better. It must be better to have taxes, to have communications and travel controlled by private ownership instead of the state, to have the water taxed, and the light taxed and to have the very rich and the very poor

and all that sort of thing. It is my duty as a veracious traveler to relate what I did see. Nothing more, nothing less. But much of it grated upon my feelings dreadfully, or prejudices if you choose to call it. What we are born in the midst of appears like second nature.

Here was a working man, with a beautiful house, like a rich man upon the Earth, excepting that he worked. In fact in Mars there are no idle rich. There were musical instruments hanging on the walls and upon my making some remark about music, the family proposed that we should adjourn to a room which I may call the family living room; I did not see a parlor in all Mars. Here I listened to several enchanting songs, and the reader will understand it when I say that I never heard better, nor as good music, at the Academy of Music in New York, or Drury Lane in London. This is accounted for in the fact that in the schools, the teaching of music begins in the primary classes, and continues throughout their educational career. It is considered the greatest gift which can be conferred by an education. One that relieves life of its hardships and makes people happy. In any trouble, music can prove a healthful distraction or consolation. It inspires hope as well as love. It appeared not to be considered as a minister so much to luxury or sensual delight, as the spiritual part of our natures, a minister to the soul. One of the little boys brought me a vase he had painted himself at school, and burnt it also; it was fine, and beautiful as of the best Limoge. Another took from the wall a musical instrument which he handed me and which he had made himself. The young lady was not to be outdone, she led us to her room. This was a gem of art. The floor was laid with beautiful tile, representing a combat between her father and a wild beast. This she had painted herself and her brother burnt it. A large wooden chest of drawers she had painted

in exquisite pictures. The door of a wardrobe had painted upon it a beautiful youth arming himself for the hunt. The ceiling was frescoed by herself, in charming figures, and faces looking through clouds. The walls were hung with pictures of landscapes and real life.

Noticing that I admired one of these very much she presented it to me. There did not appear much of the look of work people about these premises. The dress and appointments all indicated wealth and cultivation. The time had arrived for the children to go to school, and off they all went. As I looked upon the mother of the household, a lady in voice, manner and appearance, and saw no servants, I wondered in my mind as to who did all the work; we shortly bid them adieu. Soon as we got upon the road I ventured the remark that I supposed her friend the artisan, or rather artist, was a member of some manufacturing firm, or at least foreman of an establishment.

"Not at all," was the reply of Isole. "He has his percentage in the workman's share of profits, but he is a fair example of our ordinary workmen."

"Do you mean to say that all of the families residing in these houses are as cultivated as that family?"

"Generally; some of them more so, according to their natural abilities," said Isole.

"Or circumstances," I added.

"No, not circumstances," she replied. "Our people are all secure in their circumstances. In the first place we all have an education which develops our mental and physical powers and teaches us many practical ways of turning nature to account. The trades—the arts, the sciences we master, naturally as we go along by the natural order of things, and besides our training, we have inherited the accumulated wealth of ages in libraries, galleries of art, parks, amusements and government property held for

public use, and which are all educational. No man is allowed to idle his time away without a cause and as productive industry is a habit with all the people, why should their refinement, happiness or homes depend upon money or wealth?"

I confess all this was so strange to me that I could not find an answer. I could not even understand it.

"If human beings," she continued, "had to work mechanically upon certain divisions of labor, the science of which they did not understand any more than the dumb animals, and had to work so much that after the physical system was exhausted that there should be no nerve power left for the improvement of the mind, then I should say that the circumstances of such a man, independent of himself, were degrading and that his vices might be accounted for by these circumstances, but in our country our entire educational and political system is antagonistic to this condition. Such a state of things under our law is impossible, usages and surroundings make it impossible."

"You speak as though your country had other experiences in past times than the present," I remarked.

"You are right," replied Isole. "In our ages of history we have had about all kinds of human experiences. It is the most important knowledge that we obtain to inform ourselves of these experiences. Such are the tests of all theories. So much is this fact recognized, that in our archives of history all subjects are systematized, and placed under proper divisions for reference. The most practical literary men of the Republic have been engaged at all times upon this work, otherwise our history in the course of many thousands of years would be so voluminous as to resemble a vast mine without order."

During this conversation, which may be considered rather dry, the beautiful Ismene and Enone listened with attention and I mentally resolved to consult these records upon some

subjects which had been disturbing the thoughts of different people upon Earth for many centuries.

As we quietly moved along breathing the morning air, perfumed with the fragrance of the trees and flowers and enlivened by the song of birds, I was disposed to study the beauty of the scene, and not merely enjoy it. I found the roads were of a fair and commodious width, and made of small stones or gravel, rolled down. The sidewalks were made of the same material and were dry, smooth and pleasant. The streets were all lined with trees for shade. These trees had grown so large as to afford shade for the streets as well as sidewalks, and appeared to be full of birds. They were largely nut growing trees, and as we got farther into the country they appeared to be largely fruit trees.

I expressed my surprise at the abundance of foliage.

"True it is beautiful," replied Isole, "and beauty to the soul is food as much so as bread to the body, but it is not for the beauty alone that we have so much tree planting. We found in long ages past that man could not live without the trees. They attract rains, prevent drouths, prevent sudden changes in the atmosphere, afford homes to birds, who do not only fill the air with song, but they eat the insect destroyers of our fruits, vegetables and grains. Besides shade, the planting of them is morally elevating. The man or woman or child that plants a shade tree does something for some one else than themselves. Something for future ages and the mind and feelings are broadened, deepened and liberalized by the thought that follows the act. In our schools all this is taught. Children are taught to know that in order to be happy themselves, they must seek the welfare of others," and the large eyes of Isole dilated and a sweet expression spread over her features, which was reflected upon the faces of the others.

As we passed along, many flowers and grasses and leaves were gathered by Faunus and Enone and placed in a little basket.

When they did not recognize them, their botanical properties were explained by Ismene, and when she failed, the appeal was made to Isole herself. There were many plants and flowers which I recognized as belonging to Earth, and it made me feel in this far off planet as though there was a link of kinship, and that after all we were of one great family, and children of one universal God.

Along the wayside, under the trees were benches or rests, placed there by the people for accommodation of pedestrians. Often there would be on them a humorous or moral verse of poetry. This was a pleasing feature as it illustrated the benevolent disposition of the people. There were no stone walls or fences, but low flowering hedges and often the golden fruit hung from branches far over the hedge, and it hung in perfect security.

It was not long before we passed out of the district of mechanics' houses, to those of gardeners. These people had lonely picturesque houses, or cottages of stone with deep bay windows. There were rounded turrets upon which would have been the corners, with windows in them. The walls were all covered with vines in which the birds nested, and carried on their varied life. Men, women and children all appeared to be working out of doors, taking such part as suited their strength. We stopped in front of a place, and I was surprised to learn that the children were not those who belonged to the houses, but belonged to a school in the neighborhood and had been distributed about to perform some light labor for the sake of exercise and instruction. Isole informed me that each of those gardeners was a full graduate of their schools and understood botany most thoroughly and all the properties of the various plant life. We went from one of these lonely places and what was my amusement to discover things growing under a lot of violet colored glass. So the blue glass theory had reached them,

but upon inquiry, I found that they had made use of color in the production of various vegetables for many thousand years; not only this, but that electrical wires were laid under rows of vegetables in the beds, which wires were supplied with electricity by motors at a distance from which radiated wires in all directions, and at public expense. This was said to greatly promote their growth.

Hearing about so much being free of any taxation jarred upon my ideas of public policy, and I asked Isole if this thing of giving people free education, free transportation, light, heat, and so many things which I thought they should pay for, did not mean public robbery.

The eyes of Isole opened wide with astonishment; eyeing me closely, as though for the first time I had evinced a dangerous eccentricity.

Said she, "Public robbery? Rob who?"

I then explained that I meant relieving the people of taxes, that they might fall all the heavier upon the rich.

"Ah," said Isole, "I have a glimmer of what you mean, but you do not reflect upon our system of government. The public inherits the riches, and they must be dispensed in a manner that will insure the greatest good to the greatest number, and if they did not do these things, what would be the object of government? It would certainly fall short of the public welfare."

"But do these privileges not spoil the people?"

Isole's eyes opened wide again, inquiringly.

"Make them idle," I replied.

"Man is not naturally idle," said Isole, "and our education develops his physical and mental energies. Of course in this term I include women. Besides our laws allow no idlers whether of the rich or poor."

"What do you do with them?"

"Any citizen has a right to give information, and when a citizen or public officer notices that any man is an idler, a commission is taken out, and he is tried by his neighbors. If found guilty, he is sent to the frontiers to fight the wild beasts."

"What about drunkenness?"

"Our civilization has got beyond that vice, many thousands of years ago; our system of training, and the marriage relation, having had the effect of making people happy, they ceased to narcotize or etherize their sense. This in a high degree is a mental vice. A temporary suicide. It is akin to insanity. When people were taught music, and were secured the sweets of conjugal and paternal love, and the wolf of want was driven from the door by our adoption of our humane form of government, the joy of life was found in existing, not in flying from it," and in saying this those great eyes were raised heavenward. Noble Isole.

I had some conversation with the proprietor of this place. He informed me that at school he experienced a great pleasure in horticulture and gardening. This is one of the things which all scholars learn. Those in the country were taught thoroughly, one half the time by practical work. It is also taught city scholars for about three months in the year, who are taken to the gardens in the suburbs for this purpose. In this way all the botanical properties of plant life are taught. I found this learned gardener posted upon all the natural sciences. These are thoroughly taught in all schools by practical work, and that branch is continued and becomes the permanent occupation of the scholar, whose fancy, choice or predilection it is to follow, whether it is mechanics, art, agriculture or literature. My surprise was great to notice that all were held in equal estimation, and conferred the same social standing. The reason of this is, I am informed, because every mechanic is practically an artist and man of science, being educated in the mathematics, chemistry, in fact all the sciences

bearing upon his occupation. The farmer and gardener are made thoroughly acquainted with geology, botany, agriculture, chemistry, entomology, meteorology, so that in comparison to Earth, no professor of Cambridge or Oxford knows as much, and they can verify their theories by practical tests with their own hands upon the bosom of nature.

How Earth would be transformed into a region of boundless beauty if this system should be universally introduced among our youth of both sexes. We would not find so many people educated but helpless, not knowing how to make a living. We would not find so many mechanics, not knowing the first principles of their art and being unable to account for their own handiwork. It would elevate man from being mere living machines to something God-like.

In walking over the garden, I perceived that it was covered with a system of irrigation. The water was run through pipes which led from the reservoir containing the sewerage water of the city of Esperanza. The reader perhaps remembers that this water is comparatively clean, consisting of mere surface rain water, and wash of the city. No dirt being permitted to enter the sewers, and injure the people by the exhalation of poisonous gases. But the effect of even this water was wonderful upon the growth of vegetation. There irrigating pipes extend for miles around the city. I estimated that the inhabitants of the city, by making vegetables plenty and cheap, profited more by their rational and healthful system of sewage than if they owned a bonanza.

In straying through the garden I noticed that the borders of the sidewalks were lined with flowers, and at the end of the walk I noticed a green arbor which covered something white, and upon approaching it I found it to be a fine marble bust, standing upon a pedestal, of the gardener himself. It had been

executed by one of his sons whilst graduating through the schools and working in the art department of sculpture. Canova himself could not do better, and I was not more surprised at the excellence of the art, than at the idea of such things being connected with so humble an occupation, but then I immediately reflected that in Mars it was not humble. Science and art had elevated all occupations, not leveled all distinctions.

We left this lovely spot, and wandered on past many places, and also orchards of luscious fruits, of which we were often invited to partake by the smiling owners, and in time we left behind us the gardens and came to larger farms. Here we saw cattle and apple orchards just as upon Earth, but better cultivated. Finally by noon, we selected a spot for our luncheon. It was upon the side of a hill at the foot of which ran a sweet stream. We all sat down under some apple trees and from out of the basket came a plain lunch, but which we all thought delicious after such a walk. The girls were in fine spirits, and Isole proposed to them that they should run a race along a level lawn which bordered the stream for quite a distance. It was no sooner proposed than up jumped the young women, eager for the trail. It was amusing to see how quickly they took their positions, placed their elbows to their sides, threw out their chests, and waited for the word. When it was given, they darted off like two fawns and skimmed over the plain. The goal was a tree at a distance of some hundred yards. For a while they kept breast to breast, but after a while Enone distanced Ismene by only a few feet. Isole made a wreath from a laurel bush near by, and when the two girls came up, placed it on the head of Enone. We then resumed our walk, and before us I saw rising up heavenward a beautiful mountain with sharp peaks that pierced the skies and were so high that they were crowned with ice. They looked like crystal peaks. Between there we were to climb our way.

We were now going to a place inaccessible to any ordinary vehicles. The mountain had to be crossed by a narrow foot-path and beyond it was a village that exists now as it has existed for centuries. It had been kept intact and the same out of veneration for the great law maker who had humanized the world of Mars and made it a paradise in comparison to the world it had been before. As we walked along we met other pedestrians, who always had for us a pleasant greeting, such as God bless you; Do not hurry. I asked Isole why they said do not hurry.

She replied, "Because hurry is the enemy of all enjoyment and destructive of the poetry or beauty of life."

We did not hurry. The play of the girls was one of the most pleasing features of the day. Beneath the trees in front of lovely little cottages there would often be benches where we rested and upon the tree sometimes pleasing inscriptions; on one was as follows, "This is a place to repose oneself; to speak what is true; to drink what is clear; to love what is at home, and not to touch which is not yours." I thought this wisdom not only good but decidedly practical.

In this walk we had no fear of wild beasts as the country had been cleared of them, and as for the man-eating monsters, there were guards to be seen everywhere. The cost from this cause to the industry of the country must have been very great. As we ascended the mountain it was charming to look back over the lovely landscape of farms, orchards, gardens, and the beautiful city of Esperanza, with its grand architecture, and far away to the turbulent ocean, whose white and foamy crests we could see at this distance, and without a sail. We trudged along passing the most lovely waterfalls and finally reached the summit of our road from which we suddenly got a glimpse of the green valley beyond. A silver stream went winding through its centre and upon all sides it was surrounded by picturesque

mountains. In its centre was a simple little village. Very small houses, possessing little of the beauty or conveniences in the buildings that I had seen in other places. There was every natural beauty around it, but the houses were different from what I had seen elsewhere in Mars, small and comfortless, but in the centre was a beautiful old palace, brown with age. The spire of a church rose behind it, but the main portion of which was hidden by the palace, and the spire was surmounted by a gilded cross. What may be the reader's astonishment to learn this. What was my astonishment when I found the church of Christ in Mars. Learned that the living Christ had been there. I knew that it had been the theory of some that Christ had appeared upon Earth in several places, and at different times. I had heard some go so far as to say that Buddha was Christ, but there had been no thought of his having appeared in other stars and universes than our own; and why not? Why should humanity elsewhere not have the blessings of the ethics of Christianity? I have reserved this startling fact for the reader until now, that surprises should be gradually described and yet it was a satisfaction to me, because it assured to me that the laws and manners and customs of the people of Mars, so widely different from our own, are not inconsistent with Christianity.

"Speaking of Christianity," I said, "do creditors in Mars forgive their debtors?"

"We have no debtors," she replied.

"No debt, do you say? Why, credit is the highest evidence of our civilization upon Earth. How can the wheels of commerce move without it?"

"Commerce is not the first object in life, nor is money," said Isole. "We found when we changed the law, that the happiness of the people increased and the sentiment of honor was more cultivated, and besides we found that it did not inter-

fere with commerce. These sentiments should be the highest of our pursuits."

I then thought of the exchanges of New York, London, and Paris, where so much business is done, upon honor only, as it is called, and millions often hang upon a man's word, but I said, "Then there are no mortgages, no sheriff's sales, no game by which the shrewd, unscrupulous and powerful can entrap the weak. Why, what will become of our civilization?"

"War you had better call it. War under the guise of peace, and law, not honor, not culture, not humanity. No brotherhood, not the cultivation of the good and beautiful, but the cultivation of the strife of the strong for advantage over the weak, and which civilization, as you call it, should be replaced by the ethics of Christ, as they really are, and the white doves of love and peace instead of the demons of cruelty and selfishness."

I thought to myself that women have opinions on Mars.

Stretching out her hand, "There," said Isole, "is the birth-place of our great law-maker, statesmen and philanthropist, who is loved and venerated as the greatest and best of mankind. Out of veneration to him the state has preserved his home, and the village here in the mountains in the same condition as when he died. Nothing is allowed to be changed, and whilst it is made interesting as connected with this great and good man it is an example of what was in past history, and it enables the traveler to compare it with our present civilization."

"What were the subjects of these laws?"

"Education."

"Sanitary or health influences; and the equitable rights of men. These laws may be said to have changed the face of the world," replied Isole, "but here you will see nothing of them. You will only see where this great man lived, and some, of what we term, our antiquities."

"And have things been kept in their old state from sentimentalism?" I replied.

"Partly so, to the honor of the people, I think. I believe in sentiment. A human being without it is a monster. It is sentiment which makes everything lofty and self-denying in the world. Take a human being whose whole thought is controlled by sordid notions, vanity and worldly materialism and there can be nothing lower in the scale of created beings."

There were little cottages all around us, perched upon sunny spots with pleasant views, and as we descended to the valley, they had green meadows before them and were surrounded by apple trees. Along the north side of the valley ran like a perpendicular wall, a high rocky mountain, the stony peaks of which varied in color from red to purple and yellow, which had a beautiful effect in the sun light.

Isole informed me that the people of the valley and town held all this property leased from the state, upon the express condition that no changes should be made in order that this small part of the country might retain the same appearance that it did when the greatly beloved statesman lived, wrote and talked. This had been done to a certain extent, but the advanced condition of humanity since the time that the law maker had died, had its influence necessarily upon the people, and the memory of the good man was so much loved, that the people were fond of observing the traditions of the past.

As we passed along, we met shepherds attending to their flocks of goats and sheep, sometimes beguiling themselves by playing upon a reed with which they would make good music. We passed lovely cottages with vine-covered arbors in front of them and before cool stone vaults we saw women churning butter. Another curious custom was that of training the limbs of fruit trees, such as apricots, around the windows, and which

had a beautiful effect, and now as we went along I was reminded more and more of some parts of Europe I had seen, to such a degree that sometimes I felt as though I had awakened from a dream, until I looked at my beautiful companions. As we passed along I saw none of the peculiar improvements which I had seen before, but things were evidently primitive. The women also wore an awkward costume, consisting of a great tall woolen cap and stockings, which were bundled between the knee and ankle, making all the women look as though they had the dropsy. We went into the house of one of the cottagers and found the people very polite. In answer to a request of Isole to see some of these clothes, for my benefit the women of the house opened a chest of drawers and displayed her fine things upon a bed, and dressed up Enone as a peasant girl. She looked charming, even in these strange clothes; to a question of mine as to why they wore such inconvenient clothes, the reply was to the effect that it was in compliance with a solemn obligation they had entered into to retain the appearance of everything nearly as possible, as it was in the time of their greatest law-maker. We soon left this place and gradually approached the little village with its small stone houses. We went to the single inn and found the place full of people, as there was to be a great musical festival the next day. The ladies were able to find a room, but as for me, I had to put up with the top of a table and a blanket after the other people retired. During the evening we were regaled with delightful music by these strange-looking people. The next morning we were all up bright and early.

A few days later after the above events saw three individuals in the library of Archos. That is, the Count, Archos and myself. I found that the Count had not been idle in my absence, but was showing Archos the plans and drawings for a submarine

boat, with which to navigate the dangerous and stormy seas of Mars.

"With this boat," said the Count, "when a storm comes on, we can descend to quiet waters and proceed upon our voyage as though nothing had happened; and in this boat," said he, "I propose not only to visit your most powerful nations, but to circumnavigate your globe."

Archos looked at him with evident admiration. I was anxious, however, to approach another and entirely different subject, and after the boat had been discussed for some time, I remarked to Archos, "Upon my recent walk through the country, I was struck by the absence of prisons, what do you do with your criminals?"

"Oh," said Archos, "that is a very interesting matter. About two thousand years ago we had prisons, but with the reform in the treatment of deformed, diseased and idiotic children, also came a reform in the treatment of criminals. Our doctors about that time came to the conclusion that the criminal disposition was owing generally to a diseased brain and nervous system. In short, that in all cases, it either was or was not the subject of such disease, and that these cases deserved different treatment. That where it was an established fact, that the propensity was a disease, it should be treated as the diseased were treated, and if it was not, it could be controlled by intellectual influences. The law was therefore passed that imprisonment and corporal punishment should be done away with, and that the following regulations should be substituted.

"In case of adults, when the first and second offences were committed and they were convicted of the same after a full trial, that they should be admonished for forty eight hours. That is, that our doctors learned in human nature and possessed of the wisdom of honesty, should explain to them the principles of right and wrong, and the personal interest and

advantage they had in always doing right. We found that this usually sufficed, but upon a third conviction the punishment was death. In this way we rid society of a permanent criminal class, and secured society against their propagation, so that now it is very seldom that any crime or dishonesty is ever perpetrated, not merely the ordinary crimes, but it is very seldom that embezzlement or breach of trust occurs, which we treat in the same way."

"But," said I, "is this not inhumane. You may take life for trivial offences."

"No," said Archos. "It was for the sake of humanity we adopted the law, humanity to the subject, who was controlled by the propensity of evil, to society, as the innocent are always the sufferers from the acts of such people, to the human race, that their species should not be propagated."

"Ah," said the Count, these are the reasons of great minds. If such reasons could be made to prevail on Earth, the causes of much of its unhappiness would cease."

Somewhat shocked, I asked, "How do you treat drunkenness?"

"We treat it," said Archos, "as a crime. Just in the same way; and we should do this particularly as the habitual use of liquor to excess has been found to develop the nervous diseases, which lead to all other crimes, by stimulating the passions, and selfish propensities beyond control."

"I cannot but think," I replied, "that to treat drunkenness as a crime is wrong."

"We thought so," replied Archos, "for a long while, but going back through our statistics for several thousand years, we found that a large proportion of the crimes, the idiocy, the deformed bodies, to say nothing of other miseries of mankind, was induced by the use of liquor."

"That reminds me," I replied, "you remarked that your new criminal code was adopted upon the advice of your wise doctors, who treated deformed and diseased people. How do they treat them?"

"All infants and children," replied Archos, "who are born diseased, and deformed mentally or physically, the idiotic and incurable diseases of the spine and the like, are put to death by an anaesthetic. This is done to save human suffering, and to prevent the propagation of the species."

"Shocking!" I impulsively ejaculated.

"So we first thought," replied Archos, "and it was only after thousands of years that we arrived at these conclusions. At first they were supported in the Alms Houses at the public expense; we found in time that the criminal classes and drunkards were largely recruited from the children of these people, not only that, but their horrible diseases were extended like a stream of poison down through the life blood of the human race. That allowing them to live, simply was giving life to suffering, disease and crime, which involved the entire human race."

"This," said the Count, "is now the advanced idea of the most learned physicians upon Earth, and so as laymen are sufficiently intelligent to understand it, the same course will be pursued upon Earth as in Mars, in regard to the treatment of such diseases. "Now," said he, "I can understand the perfection of the human race, upon your planet, the perfect forms of your people, their perfect health, and wonderful longevity."

"Ah, yes," replied Archos, "but it is not only the healthy bodies, but the healthy and consequently happy minds."

"In times of what we call on Earth, antiquity," replied the Count, "special attention was paid to producing the most perfect form of the human race. In those days the deformed were treated in the same way as in Mars. Nothing can equal

the grand specimens of the human form as transmitted to us by the chisels of Phidias and Praxiteles."

For my own part my prejudices were too strong to altogether grasp these advanced ideas, but the Count assured me, that after I had advanced beyond a simple apprenticeship in the noble order of the Rosicrucians that I would comprehend them better.

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Here this manuscript came to a sudden termination, whether the remainder was lost, or the writer had come to the end of his singular experiences, or ideas, the Editor knoweth not, but he promises that a diligent search shall be kept up, for the remainder, nearby where this was found.

Colophon

William Albertson edited and typeset this edition of Charles K. Landis' *A Trip to Mars*. The punctuation of the original typescript has been lightly modernized. Tom Kinsella supervised its publication. Thanks to Patricia A. Martinelli, Paul W. Schopp, and Edward J. Horan for proofreading the text.

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