

LETTERS FROM THE PLANETS.

CANAL LIFE ON MARS.*



MORNING came. The bright sun shone into the metal-adorned dwelling: the same glorious sun as we had known at home, and as you behold on Earth, to which indeed all Earth life—plants, animals, men—owes vitality and heat.

It shone on the ornate and bright metal pavement of copper and tin; it shone on the metal walls, and was reflected upon us.

We arose, and left the dwelling to look on the forest around. There were the crimson trees in rich splendour, through whose glinting foliage the ruddy rays of the sunlight pierced. There were the rocks rising over the tall metal dome of the house; there in an opening appeared the distant green sea and the summit of far-off snowy mountains. Red, white, and green—all were commingled in that glowing spectacle.

We returned to the house. Our kind but gigantic host welcomed us on our return, and said to me—

“If you wish to see the canals, the electric boat is at your service. You may take a long voyage in it, if you like.”

“We should indeed,” I said. “I wish my companion to see the great canals of your wonderful world. But how shall we manage about disguise?”

“I have some garments of our children, which may suit you as disguises if no one comes near our boat; and if they do, perchance they may not observe that you are of an order of beings different from ourselves.”

So he lifted the portcullis, which served for an inner door, and shortly came forth with our kind hostess, Alehiro, who brought with her the robes of metal scales and glass fibre which her children used. They were beautiful glittering robes, though very different from ours. However, we easily wrapped ourselves in them, and, covering our heads with metallic helmets, looked like two Martian children.

A little vessel was floating on the green canal waters, chained to the shore. Our host drew it towards him and entered it. He beckoned to us to do the same. We stepped on board, and lay on the couch which was in the bow. The boat was shaped like a torpedo boat, for throughout the universe the laws of mathematics and mechanics must be the same, and thus the principle of the least possible resistance must be the same, even as far as the attendant worlds of Sirius or Alcyone. Our Martian host touched a brass knob in the bow, and rapidly and silently the boat was propelled upon the green waters.

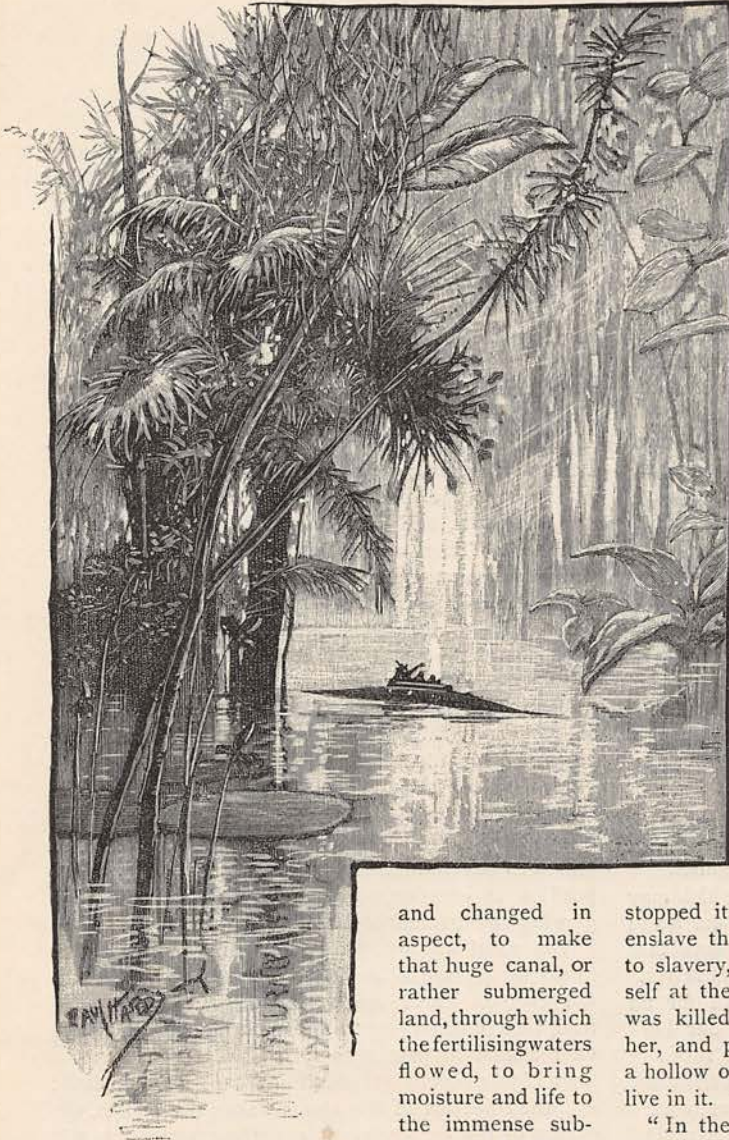
Forward we swept along the straight reach, with ruddy foliage on either side rising in crimson glories, gorgeous in the sun's light. Here and there amid

the red leaves were the glittering metal domes of dwellings. On the shore strange forms of living beings, of shapes unknown to Earth or Venus, might be seen, while others were in the water or flying in the air above. It is true that the types of life are the same throughout the solar system, and thus you, on Earth, may have all the various forms in which it is developed. But still, as there is underlying unity, there is also an infinite diversity in creation. Thus, although the forms of Earth's animal and vegetable life were there, they were all distinct from those you have on Earth. No animal was the same as that you have here, nor even very like it, although in many forms of life the type of some of the animals which you see on Earth, and such as we have with us, could be traced. Then, again, developments of life, such as are very rare on Earth, were here most common; and those which on Earth are small were here gigantic; while, on the other hand, animals which on earth are very common—*e.g.*, the horse, the bull, the sheep, the sparrow, the finch—could not be seen at all, nor any creature like them. Thus the scene before me was one of life and motion, for Mars is made to support life as much as the Earth; but still each and every development of life was distinct from what men see, and the whole scene was like the monstrous imagination of a disordered dream. Still each creature was formed in perfect harmony with its position in creation, and many were very beautiful in glowing colours and in graceful forms.

You need not wonder that in another world the forms of life are different from those on Earth, for is not (even on Earth) marine life distinct from terrestrial, though belonging to the same planet? and even on the land in past ages forms have prevailed and been highly developed, which now are rare and small: *e.g.*, the trilobites of the ancient seas, the silures, the plants of the carboniferous era, the iguanodons, and ichthyosauri, and plesiosauri of secondary ages. These are but Earthly creatures, though of Earth's infancy, and such as man might suppose fitted for another planet. Nay, more, even on Earth at this time are not the flora and fauna of Australia different from those of Europe? How different must be the life on another planet, even though one so like Earth as is Mars!

On we dashed over the green waters embosomed by the crimson forests and fields, till we came to a wide reach, which stretched for eight miles wide, and extended for a thousand miles and more (as our conductor told us) from sea to sea. Its shores were perfectly straight, and it looked like a vast river—like the Mississippi or Amazon on Earth—indeed, no river on Earth in continuous width approaches its size. But it was all the result of the industry and command over nature of the Martians. Rivers had been straightened, lowlands had been submerged, hills had been blown up, whole territories had been altered

* See “Our Second Voyage to Mars”—CASSELL'S MAGAZINE, 1889. Page 166.



"FORWARD WE SWEEP" (p. 285).

pared to this, the Suez Canal or the greatest ship canals of Earth were but as the little gutters dug by a child for an afternoon's amusement.

Moving on the vast canal, or rather artificial sound, about a mile from us, there was a floating city, resting upon huge pontoons, nearly a mile long, and about a quarter of a mile wide. Each end of the city was narrowed to a point, so its form was not unlike that of a river steamer, only its size as compared with the greatest ocean liners, like the *City of Rome* or the *Oceana*, was as these are to the little ships of your forefathers. The pontoons themselves were enormous vessels, larger than any ship you have on earth. They were bound together in rows, and a pointed one was in the head at each side, acting as a cut-water.

The city was formed like the usual towns of the

and changed in aspect, to make that huge canal, or rather submerged land, through which the fertilising waters flowed, to bring moisture and life to the immense submarine fields of vegetation which grew there. Com-

stopped it, and seized it for ransom, and wanted to enslave the people. They were yielding themselves to slavery, but she roused them to arms, and set herself at their head. They gained the victory, but she was killed. So in her memory they made a statue of her, and put it in the city; not a solid statue, but a hollow one, so that some of her descendants might live in it. They live there to this day."

"In the old war times you speak of, these floating cities must have been exposed to frequent dangers."

"Very true, they were; and this was one of the arguments that were urged against war in the final Peace Congress. They said, even supposing the inhabitants of the land could dwell in peace in their homesteads, those who lived on the seas and rivers were cosmopolites, and ought to be able to go everywhere. Then, again, you see how much of our food is derived from the waters. It was most unjust for those who lived on the shores to claim all the food supplies near them. So we declared all the waters free, and all in them, and thus we made the way to making the land free, and all nations in amity."

"On Earth," I said, "things may tend in this direction. By the law of the nations of Earth the high seas are the property of all, and international law alone rules there. If seas were a chief source of human food, and if, as I see here, a large portion of mankind—men, women, and children—lived upon the

Martians, with domed houses of bright metal, which glittered in the sun, and in the midst what looked like huge statues, but which, as I imagined, were also the residences or public buildings of the citizens. At each end was a great engine, where it was manifest force was being generated (probably steam, for smoke was issuing from one of them).

"Why do not they build their city on one huge ship? I see it rests on pontoons."

"For fear of accidents. Should a vast ship, capable of supporting such a city as that, meet with an accident—get into shallow water or strike a rock—the loss and risk would be terrible. But now that city has twenty-two pontoons on which to rest. Should any accident befall one of these, it can be removed and replaced by another, which may be obtained in any of the cities on the bank. The city is then uninjured."

"Are those great statues or houses that I see?"

"That lofty statue of a Martian lady is only the representation of a heroine who lived in this floating city of Golonor five hundred years ago. It was in the bad old days, when we had wars in our land. A king of one of the countries the city passed through

sea, we should find something of this state of things. But however have you obtained force to make these vast canals? Have all nations combined?"

"Yes, we have now immense control of nature's forces, as you know. By the action of nature's powers we can mould her to our will. These canals are the works of centuries, wrought by a whole world at peace. The force we once wasted in wars against each other we now use in overcoming nature's obstacles: in sinking land and flooding it with water when we need it; in piercing mountains and moulding them to our purposes; in widening rivers and making them straight. We can do almost what we will with nature, by the kind and loving permission of our Divine Creator, for we are a world at peace and combined, and a thousand millions of Martians with machinery and science at their disposal can, in a few centuries, do almost anything to mould the surface of our planet to our utility."

"But tell me," said my companion, "what is that other huge statue two hundred feet high that I see right in the very centre of the floating city?"

"That is merely the Town Hall, where the citizens assemble for public business. The figure represents the city of Golonor. It is the symbol they know it by from the shore, as it floats from sea to sea."

We soon got ahead of the floating city of Golonor, when another appeared going the opposite way. It was still larger, about a mile and a half long, and had seven immense towers rising from its metal domes.

"How can the inhabitants of these cities get food?" I asked.

"Do you not remember," asked my guide, "that most of our food is floating on the waters, not attached to the land? Those vast aquatic fields offer an almost endless stock of food."

He pointed to the great fields of what were more

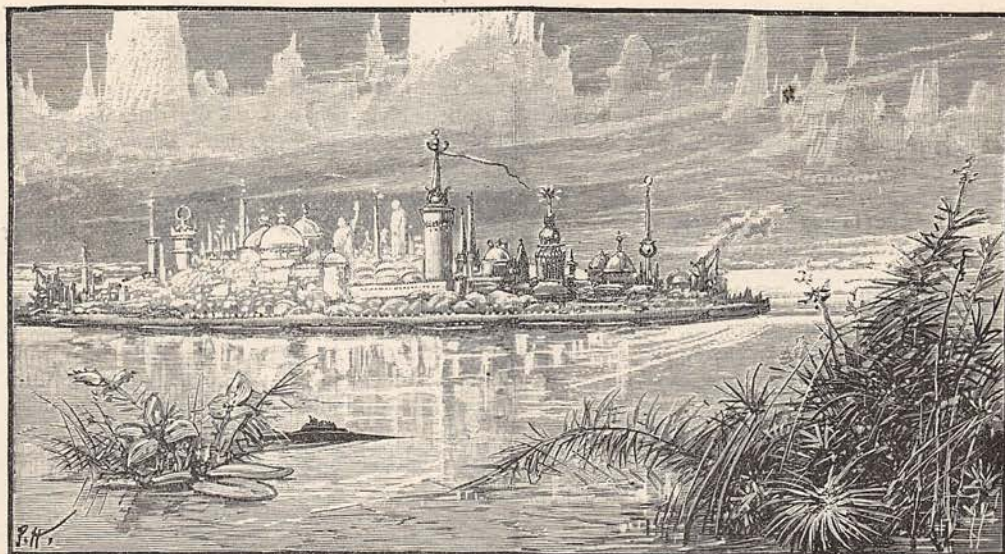
like huge algæ than anything on Earth, the vast marine plants that floated on the canals, some as big as forest trees. Many of the singular changes and variations in tint of Martian seas which even Earth's astronomers have noticed are due to the tinting of the great waters by these vast fields of marine vegetation. As on Earth men and cattle are mainly supported by the grasses and corn, so in Mars it is the aquatic plants in the canals and seas that are the main supports of life. Hence the need for the vast system of irrigation. On Earth the rice plant is the chief marsh plant that provides man with food. Here vast fields and aquatic forests laden with tons of food, transforming the oxygen and carbon of atmosphere and water into food, waved hither and thither in the watery currents, and varied with many tints the green waters.

On we floated in the centre of the stream amidst these submarine forests, passing now in one direction, now in another, the floating cities which slowly and majestically moved through the vast canals.

We had not proceeded above fifty miles before we came to another huge sound—or rather canal, stretching one hundred miles to the north, cutting our canal at right angles. On its waters were two floating cities, and vast forests of vegetation waving in the currents, with their great leaves floating like water-lilies.

Forward we went, and then, some twenty miles on, another canal, with a city built on the shore at the confluence, opened to view. So we went on passing cities and forests, both on sea and land, on this huge masterpiece of the marvellous skill and power of the Martians—an achievement as far superior to any man has yet achieved in this age of steam and iron, as the works of human skill in the nineteenth century are superior to the works of man in the Stone Age.

ALERIEL.



THE FLOATING CITY.