CHAPTER THIRTY-THIRD.

Conjectures.--Reestablishment of the Victoria's Equilibrium.--Dr.

Ferguson's New Calculations.--Kennedy's Hunt.--A Complete Exploration
of Lake Tchad.--Tangalia.--The Return.--Lari.

On the morrow, the 13th of May, our travellers, for the first time, reconnoitred the part of the coast on which they had landed. It was a sort of island of solid ground in the midst of an immense marsh. Around this fragment of terra firma grew reeds as lofty as trees are in Europe, and stretching away out of sight.

These impenetrable swamps gave security to the position of the balloon. It was necessary to watch only the borders of the lake. The vast stretch of water broadened away from the spot, especially toward the east, and nothing could be seen on the horizon, neither mainland nor islands.

The two friends had not yet ventured to speak of their recent companion. Kennedy first imparted his conjectures to the doctor.

"Perhaps Joe is not lost after all," he said. "He was a skilful lad, and had few equals as a swimmer. He would find no difficulty in swimming across the Firth of Forth at Edinburgh. We shall see him again--but how and where

I know not. Let us omit nothing on our part to give him the chance of rejoining us."

"May God grant it as you say, Dick!" replied the doctor, with much emotion. "We shall do everything in the world to find our lost friend again. Let us, in the first place, see where we are. But, above all things, let us rid the Victoria of this outside covering, which is of no further use. That will relieve us of six hundred and fifty pounds, a weight not to be despised--and the end is worth the trouble!"

The doctor and Kennedy went to work at once, but they encountered great difficulty. They had to tear the strong silk away piece by piece, and then cut it in narrow strips so as to extricate it from the meshes of the network. The tear made by the beaks of the condors was found to be several feet in length.

This operation took at least four hours, but at length the inner balloon once completely extricated did not appear to have suffered in the least degree. The Victoria was thus diminished in size by one fifth, and this difference was sufficiently noticeable to excite Kennedy's surprise.

"Will it be large enough?" he asked.

"Have no fears on that score, I will reestablish the equilibrium, and should our poor Joe return we shall find a way to start off with him again on our old route."

"At the moment of our fall, unless I am mistaken, we were not far from an island."

"Yes, I recollect it," said the doctor, "but that island, like all the islands on Lake Tchad, is, no doubt, inhabited by a gang of pirates and murderers. They certainly witnessed our misfortune, and should Joe fall into their hands, what will become of him unless protected by their superstitions?"

"Oh, he's just the lad to get safely out of the scrape, I repeat.

I have great confidence in his shrewdness and skill."

"I hope so. Now, Dick, you may go and hunt in the neighborhood, but don't get far away whatever you do. It has become a pressing necessity for us to renew our stock of provisions, since we had to sacrifice nearly all the old lot."

"Very good, doctor, I shall not be long absent."

Hereupon, Kennedy took a double-barrelled fowling-piece, and strode through the long grass toward a thicket not far off, where the frequent sound of shooting soon let the doctor know that the sportsman was making a good use of his time.

Meanwhile Ferguson was engaged in calculating the relative weight of the articles still left in the car, and in establishing the equipoise of the second balloon. He found that there were still left some thirty pounds of pemmican, a supply of tea and coffee, about a gallon and a half of brandy, and one empty water-tank. All the dried meat had disappeared.

The doctor was aware that, by the loss of the hydrogen in the first balloon, the ascensional force at his disposal was now reduced to about nine hundred pounds. He therefore had to count upon this difference in order to rearrange his equilibrium. The new balloon measured sixty-seven thousand cubic feet, and contained thirty-three thousand four hundred and eighty feet of gas. The dilating apparatus appeared to be in good condition, and neither the battery nor the spiral had been injured.

The ascensional force of the new balloon was then about three thousand pounds, and, in adding together the weight of the apparatus, of the passengers, of the stock of water, of the car and its accessories, and putting aboard fifty gallons of water, and one hundred pounds of fresh meat, the doctor got a total weight of twenty-eight hundred

and thirty pounds. He could then take with him one hundred and seventy pounds of ballast, for unforeseen emergencies, and the balloon would be in exact balance with the surrounding atmosphere.

His arrangements were completed accordingly, and he made up for Joe's weight with a surplus of ballast. He spent the whole day in these preparations, and the latter were finished when Kennedy returned. The hunter had been successful, and brought back a regular cargo of geese, wild-duck, snipe, teal, and plover. He went to work at once to draw and smoke the game. Each piece, suspended on a small, thin skewer, was hung over a fire of green wood. When they seemed in good order, Kennedy, who was perfectly at home in the business, packed them away in the car.

On the morrow, the hunter was to complete his supplies.

Evening surprised our travellers in the midst of this work. Their supper consisted of pemmican, biscuit, and tea; and fatigue, after having given them appetite, brought them sleep. Each of them strained eyes and ears into the gloom during his watch, sometimes fancying that they heard the voice of poor Joe; but, alas! the voice that they so longed to hear, was far away.

"At the first streak of day, the doctor aroused Kennedy.

"I have been long and carefully considering what should be done," said he, "to find our companion."

"Whatever your plan may be, doctor, it will suit me. Speak!"

"Above all things, it is important that Joe should hear from us in some way."

"Undoubtedly. Suppose the brave fellow should take it into his head that we have abandoned him?"

"He! He knows us too well for that. Such a thought would never come into his mind. But he must be informed as to where we are."

"How can that be managed?"

"We shall get into our car and be off again through the air."

"But, should the wind bear us away?"

"Happily, it will not. See, Dick! it is carrying us back to the lake; and this circumstance, which would have been vexatious yesterday, is fortunate now. Our efforts, then, will be limited to keeping ourselves above that vast sheet of water throughout the day. Joe cannot fail to see us, and his eyes will be constantly on the lookout in that direction. Perhaps he will even manage to let us know the place of his retreat."

"If he be alone and at liberty, he certainly will."

"And if a prisoner," resumed the doctor, "it not being the practice of the natives to confine their captives, he will see us, and comprehend the object of our researches."

"But, at last," put in Kennedy--"for we must anticipate every thing--should we find no trace--if he should have left no mark to follow him by, what are we to do?"

"We shall endeavor to regain the northern part of the lake, keeping ourselves as much in sight as possible. There we'll wait; we'll explore the banks; we'll search the water's edge, for Joe will assuredly try to reach the shore; and we will not leave the country without having done every thing to find him."

"Let us set out, then!" said the hunter.

The doctor hereupon took the exact bearings of the patch of solid land they were about to leave, and arrived

at the conclusion that it lay on the north shore of Lake
Tchad, between the village of Lari and the village of
Ingemini, both visited by Major Denham. During this
time Kennedy was completing his stock of fresh meat.
Although the neighboring marshes showed traces of the
rhinoceros, the lamantine (or manatee), and the hippopotamus,
he had no opportunity to see a single specimen of
those animals.

At seven in the morning, but not without great difficulty
--which to Joe would have been nothing--the balloon's
anchor was detached from its hold, the gas dilated,
and the new Victoria rose two hundred feet into the air.
It seemed to hesitate at first, and went spinning around,
like a top; but at last a brisk current caught it, and it
advanced over the lake, and was soon borne away at a
speed of twenty miles per hour.

The doctor continued to keep at a height of from two hundred to five hundred feet. Kennedy frequently discharged his rifle; and, when passing over islands, the aeronauts approached them even imprudently, scrutinizing the thickets, the bushes, the underbrush--in fine, every spot where a mass of shade or jutting rock could have afforded a retreat to their companion. They swooped down close to the long pirogues that navigated the lake; and the wild fishermen, terrified at the sight of the balloon, would

plunge into the water and regain their islands with every symptom of undisguised affright.

"We can see nothing," said Kennedy, after two hours of search.

"Let us wait a little longer, Dick, and not lose heart."

We cannot be far away from the scene of our accident."

By eleven o'clock the balloon had gone ninety miles. It then fell in with a new current, which, blowing almost at right angles to the other, drove them eastward about sixty miles. It next floated over a very large and populous island, which the doctor took to be Farram, on which the capital of the Biddiomahs is situated. Ferguson expected at every moment to see Joe spring up out of some thicket, flying for his life, and calling for help. Were he free, they could pick him up without trouble; were he a prisoner, they could rescue him by repeating the manoeuvre they had practised to save the missionary, and he would soon be with his friends again; but nothing was seen, not a sound was heard. The case seemed desperate.

About half-past two o'clock, the Victoria hove in sight of Tangalia, a village situated on the eastern shore of Lake Tchad, where it marks the extreme point attained by Denham at the period of his exploration.

The doctor became uneasy at this persistent setting of the wind in that direction, for he felt that he was being thrown back to the eastward, toward the centre of Africa, and the interminable deserts of that region.

"We must absolutely come to a halt," said he, "and even alight. For Joe's sake, particularly, we ought to go back to the lake; but, to begin with, let us endeavor to find an opposite current."

During more than an hour he searched at different altitudes: the balloon always came back toward the mainland. But at length, at the height of a thousand feet, a very violent breeze swept to the northwestward.

It was out of the question that Joe should have been detained on one of the islands of the lake; for, in such case he would certainly have found means to make his presence there known. Perhaps he had been dragged to the mainland. The doctor was reasoning thus to himself, when he again came in sight of the northern shore of Lake Tchad.

As for supposing that Joe had been drowned, that was not to be believed for a moment. One horrible thought glanced across the minds of both Kennedy and the doctor: caymans swarm in these waters! But neither one

nor the other had the courage to distinctly communicate this impression. However, it came up to them so forcibly at last that the doctor said, without further preface:

"Crocodiles are found only on the shores of the islands or of the lake, and Joe will have skill enough to avoid them. Besides, they are not very dangerous; and the Africans bathe with impunity, and quite fearless of their attacks."

Kennedy made no reply. He preferred keeping quiet to discussing this terrible possibility.

The doctor made out the town of Lari about five o'clock in the evening. The inhabitants were at work gathering in their cotton-crop in front of their huts, constructed of woven reeds, and standing in the midst of clean and neatly-kept enclosures. This collection of about fifty habitations occupied a slight depression of the soil, in a valley extending between two low mountains. The force of the wind carried the doctor farther onward than he wanted to go; but it changed a second time, and bore him back exactly to his starting-point, on the sort of enclosed island where he had passed the preceding night. The anchor, instead of catching the branches of the tree, took hold in the masses of reeds mixed with the thick mud of the marshes, which offered considerable resistance.

The doctor had much difficulty in restraining the balloon; but at length the wind died away with the setting in of nightfall; and the two friends kept watch together in an almost desperate state of mind.