Jules Verne

Five Weeks in a Balloon

Chapter First.

The End of a much-applauded Speech.—The Presentation of Dr. Samuel Ferguson.—Excelsior.—Full-length Portrait of the Doctor.—A Fatalist convinced.—A Dinner at the Travellers' Club.—Several Toasts for the Occasion.

There was a large audience assembled on the 14th of January, 1862, at the session of the Royal Geographical Society, No. 3 Waterloo Place, London. The president, Sir Francis M——, made an important communication to his colleagues, in an address that was frequently interrupted by applause.

This rare specimen of eloquence terminated with the following sonorous phrases bubbling over with patriotism:

"England has always marched at the head of nations" (for, the reader will observe, the nations always march at the head of each other), "by the intrepidity of her explorers in the line of geographical discovery." (General assent). "Dr. Samuel Ferguson, one of her most glorious sons, will not reflect discredit on his origin." ("No, indeed!" from all parts of the hall.)

"This attempt, should it succeed" ("It will succeed!"), "will complete and link together the notions, as yet disjointed, which the world entertains of African cartology" (vehement applause); "and, should it fail, it will, at least, remain on record as one of the most daring conceptions of human genius!" (Tremendous cheering.)

"Huzza! huzza!" shouted the immense audience, completely electrified by these inspiring words.

"Huzza for the intrepid Ferguson!" cried one of the most excitable of the enthusiastic crowd.

The wildest cheering resounded on all sides; the name of Ferguson was in every mouth, and we may safely believe that it lost nothing in passing through English throats. Indeed, the hall fairly shook with it.

And there were present, also, those fearless travellers and explorers whose energetic temperaments had borne them through every quarter of the globe, many of them grown old and worn out in the service of science. All had, in some degree, physically or morally, undergone the sorest trials. They had escaped shipwreck; conflagration; Indian tomahawks and war-clubs; the fagot and the stake; nay, even the cannibal maws of the South Sea Islanders. But still their hearts beat high during Sir Francis M——'s address, which certainly was the finest oratorical success that the Royal Geographical Society of London had yet achieved.

But, in England, enthusiasm does not stop short with mere words. It strikes off money faster than the dies of the Royal Mint itself. So a subscription to encourage Dr. Ferguson was voted there and then, and it at once attained the handsome amount of two thousand five hundred pounds. The sum was made commensurate with the importance of the enterprise.

A member of the Society then inquired of the president whether Dr. Ferguson was not to be officially introduced.

"The doctor is at the disposition of the meeting," replied Sir Francis.

"Let him come in, then! Bring him in!" shouted the audience. "We'd like to see a man of such extraordinary daring, face to face!"

"Perhaps this incredible proposition of his is only intended to mystify us," growled an apoplectic old admiral.

"Suppose that there should turn out to be no such person as Dr. Ferguson?" exclaimed another voice, with a malicious twang.

"Why, then, we'd have to invent one!" replied a facetious member of this grave Society.

"Ask Dr. Ferguson to come in," was the quiet remark of Sir Francis M——.

And come in the doctor did, and stood there, quite unmoved by the thunders of applause that greeted his appearance.

He was a man of about forty years of age, of medium height and physique. His sanguine temperament was disclosed in the deep color of his cheeks. His countenance was coldly expressive, with regular features, and a large nose—one of those noses that resemble the prow of a ship, and stamp the faces of men predestined to accomplish great discoveries. His eyes, which were gentle and intelligent, rather than bold, lent a peculiar charm to his physiognomy. His arms were long, and his feet were planted with that solidity which indicates a great pedestrian.

A calm gravity seemed to surround the doctor's entire person, and no one would dream that he could become the agent of any mystification, however harmless.

Hence, the applause that greeted him at the outset continued until he, with a friendly gesture, claimed silence on his own behalf. He stepped toward the seat that had been prepared for him on his presentation, and then, standing erect and motionless, he, with a determined glance, pointed his right forefinger upward, and pronounced aloud the single word—

"Excelsior!"

Never had one of Bright's or Cobden's sudden onslaughts, never had one of Palmerston's abrupt demands for funds to plate the rocks of the English coast with iron, made such a sensation. Sir Francis M——'s address was completely overshadowed. The doctor had shown himself moderate, sublime, and self-contained, in one; he had uttered the word of the situation—

"Excelsior!"

The gouty old admiral who had been finding fault, was completely won over by the singular man before him, and immediately moved the insertion of Dr. Ferguson's speech in "The Proceedings of the Royal Geographical Society of London."

Who, then, was this person, and what was the enterprise that he proposed?

Ferguson's father, a brave and worthy captain in the English Navy, had associated his son with him, from the young man's earliest years, in the perils and adventures of his profession. The fine little fellow, who seemed to have never known the meaning of fear, early revealed a keen and active mind, an investigating intelligence, and a remarkable turn for scientific study; moreover, he disclosed uncommon address in extricating himself from difficulty; he was never perplexed, not even in handling his fork for the first time—an exercise in which children generally have so little success.

His fancy kindled early at the recitals he read of daring enterprise and maritime adventure, and he followed with enthusiasm the discoveries that signalized the first part of the nineteenth century. He mused over the glory of the Mungo Parks, the Bruces, the Caillies, the Levaillants, and to some extent, I verily believe, of Selkirk (Robinson Crusoe), whom he considered in no wise inferior to the rest. How many a well-employed hour he passed with that

hero on his isle of Juan Fernandez! Often he criticised the ideas of the shipwrecked sailor, and sometimes discussed his plans and projects. He would have done differently, in such and such a case, or quite as well at least—of that he felt assured. But of one thing he was satisfied, that he never should have left that pleasant island, where he was as happy as a king without subjects—no, not if the inducement held out had been promotion to the first lordship in the admiralty!

It may readily be conjectured whether these tendencies were developed during a youth of adventure, spent in every nook and corner of the Globe. Moreover, his father, who was a man of thorough instruction, omitted no opportunity to consolidate this keen intelligence by serious studies in hydrography, physics, and mechanics, along with a slight tincture of botany, medicine, and astronomy.

Upon the death of the estimable captain, Samuel Ferguson, then twenty-two years of age, had already made his voyage around the world. He had enlisted in the Bengalese Corps of Engineers, and distinguished himself in several affairs; but this soldier's life had not exactly suited him; caring but little for command, he had not been fond of obeying. He, therefore, sent in his resignation, and half botanizing, half playing the hunter, he made his way toward the north of the Indian Peninsula, and crossed it from Calcutta to Surat—a mere amateur trip for him.

From Surat we see him going over to Australia, and in 1845 participating in Captain Sturt's expedition, which had been sent out to explore the new Caspian Sea, supposed to exist in the centre of New Holland.

Samuel Ferguson returned to England about 1850, and, more than ever possessed by the demon of discovery, he spent the intervening time, until 1853, in accompanying Captain McClure on the expedition that went around the

American Continent from Behring's Straits to Cape Farewell.

Notwithstanding fatigues of every description, and in all climates, Ferguson's constitution continued marvellously sound. He felt at ease in the midst of the most complete privations; in fine, he was the very type of the thoroughly accomplished explorer whose stomach expands or contracts at will; whose limbs grow longer or shorter according to the resting-place that each stage of a journey may bring; who can fall asleep at any hour of the day or awake at any hour of the night.

Nothing, then, was less surprising, after that, than to find our traveller, in the period from 1855 to 1857, visiting the whole region west of the Thibet, in company with the brothers Schlagintweit, and bringing back some curious ethnographic observations from that expedition.

During these different journeys, Ferguson had been the most active and interesting correspondent of the Daily Telegraph, the penny newspaper whose circulation amounts to 140,000 copies, and yet scarcely suffices for its many legions of readers. Thus, the doctor had become well known to the public, although he could not claim membership in either of the Royal Geographical Societies of London, Paris, Berlin, Vienna, or St. Petersburg, or yet with the Travellers' Club, or even the Royal Polytechnic Institute, where his friend the statistician Cockburn ruled in state.

The latter savant had, one day, gone so far as to propose to him the following problem: Given the number of miles travelled by the doctor in making the circuit of the Globe, how many more had his head described than his feet, by reason of the different lengths of the radii?—or, the number of miles traversed by the doctor's head and feet

respectively being given, required the exact height of that gentleman?

This was done with the idea of complimenting him, but the doctor had held himself aloof from all the learned bodies—belonging, as he did, to the church militant and not to the church polemical. He found his time better employed in seeking than in discussing, in discovering rather than discoursing.

There is a story told of an Englishman who came one day to Geneva, intending to visit the lake. He was placed in one of those odd vehicles in which the passengers sit side by side, as they do in an omnibus. Well, it so happened that the Englishman got a seat that left him with his back turned toward the lake. The vehicle completed its circular trip without his thinking to turn around once, and he went back to London delighted with the Lake of Geneva.

Doctor Ferguson, however, had turned around to look about him on his journeyings, and turned to such good purpose that he had seen a great deal. In doing so, he had simply obeyed the laws of his nature, and we have good reason to believe that he was, to some extent, a fatalist, but of an orthodox school of fatalism withal, that led him to rely upon himself and even upon Providence. He claimed that he was impelled, rather than drawn by his own volition, to journey as he did, and that he traversed the world like the locomotive, which does not direct itself, but is guided and directed by the track it runs on.

"I do not follow my route;" he often said, "it is my route that follows me."

The reader will not be surprised, then, at the calmness with which the doctor received the applause that welcomed him in the Royal Society. He was above all such trifles, having no pride, and less vanity. He looked upon the proposition addressed to him by Sir Francis M——as the

simplest thing in the world, and scarcely noticed the immense effect that it produced.

When the session closed, the doctor was escorted to the rooms of the Travellers' Club, in Pall Mall. A superb entertainment had been prepared there in his honor. The dimensions of the dishes served were made to correspond with the importance of the personage entertained, and the boiled sturgeon that figured at this magnificent repast was not an inch shorter than Dr. Ferguson himself.

Numerous toasts were offered and quaffed, in the wines of France, to the celebrated travellers who had made their names illustrious by their explorations of African territory. The guests drank to their health or to their memory, in alphabetical order, a good old English way of doing the thing. Among those remembered thus, were: Abbadie, Adams, Adamson, Anderson, Arnaud, Baikie, Baldwin, Barth, Batouda, Beke, Beltram, Du Berba, Bimbachi, Bolognesi, Bolwik, Belzoni, Bonnemain, Brisson, Browne, Bruce, Brun-Rollet, Burchell, Burckhardt, Burton, Cailland, Caillie, Campbell, Chapman, Clapperton, Clot-Bey, Colomieu, Courval, Cumming, Cuny, Debono, Decken, Denham, Desavanchers, Dicksen, Dickson, Dochard, Du Chaillu, Duncan, Durand, Duroule, Duveyrier, D'Escayrac, De Lauture, Erhardt, Ferret, Fresnel, Galinier, Galton, Geoffroy, Golberry, Hahn, Halm, Harnier, Hecquart, Heuglin, Hornemann, Houghton, Imbert, Kauffmann, Knoblecher, Krapf, Kummer, Lafargue, Laing, Lafaille, Lambert, Lamiral, Lampriere, John Lander, Richard Lander, Lefebvre, Lejean, Levaillant, Livingstone, MacCarthy, Maggiar, Maizan, Malzac, Moffat, Mollien, Monteiro, Morrison, Mungo Park, Neimans, Overweg, Panet, Partarrieau, Pascal, Pearse, Peddie, Penney, Petherick, Poncet, Prax, Raffenel, Rabh, Rebmann, Richardson, Riley, Ritchey, Rochet d'Hericourt, Rongawi, Roscher, Ruppel, Saugnier, Speke, Steidner, Thibaud, Thompson, Thornton,

Toole, Tousny, Trotter, Tuckey, Tyrwhitt, Vaudey, Veyssiere, Vincent, Vinco, Vogel, Wahlberg, Warrington, Washington, Werne, Wild, and last, but not least, Dr. Ferguson, who, by his incredible attempt, was to link together the achievements of all these explorers, and complete the series of African discovery.

Chapter Second.

The Article in the Daily Telegraph.—War between the Scientific Journals.—Mr. Petermann backs his Friend Dr. Ferguson.—Reply of the Savant Koner.—Bets made.—Sundry Propositions offered to the Doctor.

On the next day, in its number of January 15th, the Daily Telegraph published an article couched in the following terms:

"Africa is, at length, about to surrender the secret of her vast solitudes; a modern OEdipus is to give us the key to that enigma which the learned men of sixty centuries have not been able to decipher. In other days, to seek the sources of the Nile—fontes Nili quoerere—was regarded as a mad endeavor, a chimera that could not be realized.

"Dr. Barth, in following out to Soudan the track traced by Denham and Clapperton; Dr. Livingstone, in multiplying his fearless explorations from the Cape of Good Hope to the basin of the Zambesi; Captains Burton and Speke, in the discovery of the great interior lakes, have opened three highways to modern civilization. THEIR POINT OF INTERSECTION, which no traveller has yet been able to reach, is the very heart of Africa, and it is thither that all efforts should now be directed.

"The labors of these hardy pioneers of science are now about to be knit together by the daring project of Dr. Samuel Ferguson, whose fine explorations our readers have frequently had the opportunity of appreciating.

"This intrepid discoverer proposes to traverse all Africa from east to west IN A BALLOON. If we are well informed, the point of departure for this surprising journey is to be the island of Zanzibar, upon the eastern coast. As for the

point of arrival, it is reserved for Providence alone to designate.

"The proposal for this scientific undertaking was officially made, yesterday, at the rooms of the Royal Geographical Society, and the sum of twenty-five hundred pounds was voted to defray the expenses of the enterprise.

"We shall keep our readers informed as to the progress of this enterprise, which has no precedent in the annals of exploration."

As may be supposed, the foregoing article had an enormous echo among scientific people. At first, it stirred up a storm of incredulity; Dr. Ferguson passed for a purely chimerical personage of the Barnum stamp, who, after having gone through the United States, proposed to "do" the British Isles.

A humorous reply appeared in the February number of the Bulletins de la Societe Geographique of Geneva, which very wittily showed up the Royal Society of London and their phenomenal sturgeon.

But Herr Petermann, in his Mittheilungen, published at Gotha, reduced the Geneva journal to the most absolute silence. Herr Petermann knew Dr. Ferguson personally, and guaranteed the intrepidity of his dauntless friend.

Besides, all manner of doubt was quickly put out of the question: preparations for the trip were set on foot at London; the factories of Lyons received a heavy order for the silk required for the body of the balloon; and, finally, the British Government placed the transport-ship Resolute, Captain Bennett, at the disposal of the expedition.

At once, upon word of all this, a thousand encouragements were offered, and felicitations came pouring in from all quarters. The details of the undertaking were published in full in the bulletins of the Geographical

Society of Paris; a remarkable article appeared in the Nouvelles Annales des Voyages, de la Geographie, de l'Histoire, et de l'Archaeologie de M. V. A. Malte-Brun ("New Annals of Travels, Geography, History, and Archaeology, by M. V. A. Malte-Brun"); and a searching essay in the Zeitschrift fur Allgemeine Erdkunde, by Dr. W. Koner, triumphantly demonstrated the feasibility of the journey, its chances of success, the nature of the obstacles existing, the immense advantages of the aerial mode of locomotion, and found fault with nothing but the selected point of departure, which it contended should be Massowah, a small port in Abyssinia, whence James Bruce, in 1768, started upon his explorations in search of the sources of the Nile. Apart from that, it mentioned, in terms of unreserved admiration, the energetic character of Dr. Ferguson, and the heart, thrice panoplied in bronze, that could conceive and undertake such an enterprise.

The North American Review could not, without some displeasure, contemplate so much glory monopolized by England. It therefore rather ridiculed the doctor's scheme, and urged him, by all means, to push his explorations as far as America, while he was about it.

In a word, without going over all the journals in the world, there was not a scientific publication, from the Journal of Evangelical Missions to the Revue Algerienne et Coloniale, from the Annales de la Propagation de la Foi to the Church Missionary Intelligencer, that had not something to say about the affair in all its phases.

Many large bets were made at London and throughout England generally, first, as to the real or supposititious existence of Dr. Ferguson; secondly, as to the trip itself, which, some contended, would not be undertaken at all, and which was really contemplated, according to others; thirdly, upon the success or failure of the enterprise; and fourthly, upon the probabilities of Dr. Ferguson's return.

The betting-books were covered with entries of immense sums, as though the Epsom races were at stake.

Thus, believers and unbelievers, the learned and the ignorant, alike had their eyes fixed on the doctor, and he became the lion of the day, without knowing that he carried such a mane. On his part, he willingly gave the most accurate information touching his project. He was very easily approached, being naturally the most affable man in the world. More than one bold adventurer presented himself, offering to share the dangers as well as the glory of the undertaking; but he refused them all, without giving his reasons for rejecting them.

Numerous inventors of mechanism applicable to the guidance of balloons came to propose their systems, but he would accept none; and, when he was asked whether he had discovered something of his own for that purpose, he constantly refused to give any explanation, and merely busied himself more actively than ever with the preparations for his journey.

Chapter Third.

The Doctor's Friend.—The Origin of their Friendship.—Dick Kennedy at London.—An unexpected but not very consoling Proposal.—A Proverb by no means cheering.—A few Names from the African Martyrology.—The Advantages of a Balloon.—Dr. Ferguson's Secret.

Dr. Ferguson had a friend—not another self, indeed, an alter ego, for friendship could not exist between two beings exactly alike.

But, if they possessed different qualities, aptitudes, and temperaments, Dick Kennedy and Samuel Ferguson lived with one and the same heart, and that gave them no great trouble. In fact, quite the reverse.

Dick Kennedy was a Scotchman, in the full acceptation of the word—open, resolute, and headstrong. He lived in the town of Leith, which is near Edinburgh, and, in truth, is a mere suburb of Auld Reekie. Sometimes he was a fisherman, but he was always and everywhere a determined hunter, and that was nothing remarkable for a son of Caledonia, who had known some little climbing among the Highland mountains. He was cited as a wonderful shot with the rifle, since not only could he split a bullet on a knife-blade, but he could divide it into two such equal parts that, upon weighing them, scarcely any difference would be perceptible.

Kennedy's countenance strikingly recalled that of Herbert Glendinning, as Sir Walter Scott has depicted it in "The Monastery"; his stature was above six feet; full of grace and easy movement, he yet seemed gifted with herculean strength; a face embrowned by the sun; eyes keen and black; a natural air of daring courage; in fine, something

sound, solid, and reliable in his entire person, spoke, at first glance, in favor of the bonny Scot.

The acquaintanceship of these two friends had been formed in India, when they belonged to the same regiment. While Dick would be out in pursuit of the tiger and the elephant, Samuel would be in search of plants and insects. Each could call himself expert in his own province, and more than one rare botanical specimen, that to science was as great a victory won as the conquest of a pair of ivory tusks, became the doctor's booty.

These two young men, moreover, never had occasion to save each other's lives, or to render any reciprocal service. Hence, an unalterable friendship. Destiny sometimes bore them apart, but sympathy always united them again.

Since their return to England they had been frequently separated by the doctor's distant expeditions; but, on his return, the latter never failed to go, not to ASK for hospitality, but to bestow some weeks of his presence at the home of his crony Dick.

The Scot talked of the past; the doctor busily prepared for the future. The one looked back, the other forward. Hence, a restless spirit personified in Ferguson; perfect calmness typified in Kennedy—such was the contrast.

After his journey to the Thibet, the doctor had remained nearly two years without hinting at new explorations; and Dick, supposing that his friend's instinct for travel and thirst for adventure had at length died out, was perfectly enchanted. They would have ended badly, some day or other, he thought to himself; no matter what experience one has with men, one does not travel always with impunity among cannibals and wild beasts. So, Kennedy besought the doctor to tie up his bark for life, having done enough for science, and too much for the gratitude of men.

The doctor contented himself with making no reply to this. He remained absorbed in his own reflections, giving himself up to secret calculations, passing his nights among heaps of figures, and making experiments with the strangest-looking machinery, inexplicable to everybody but himself. It could readily be guessed, though, that some great thought was fermenting in his brain.

"What can he have been planning?" wondered Kennedy, when, in the month of January, his friend quitted him to return to London.

He found out one morning when he looked into the Daily Telegraph.

"Merciful Heaven!" he exclaimed, "the lunatic! the madman! Cross Africa in a balloon! Nothing but that was wanted to cap the climax! That's what he's been bothering his wits about these two years past!"

Now, reader, substitute for all these exclamation points, as many ringing thumps with a brawny fist upon the table, and you have some idea of the manual exercise that Dick went through while he thus spoke.

When his confidential maid-of-all-work, the aged Elspeth, tried to insinuate that the whole thing might be a hoax—

"Not a bit of it!" said he. "Don't I know my man? Isn't it just like him? Travel through the air! There, now, he's jealous of the eagles, next! No! I warrant you, he'll not do it! I'll find a way to stop him! He! why if they'd let him alone, he'd start some day for the moon!"

On that very evening Kennedy, half alarmed, and half exasperated, took the train for London, where he arrived next morning.

Three-quarters of an hour later a cab deposited him at the door of the doctor's modest dwelling, in Soho Square, Greek Street. Forthwith he bounded up the steps and

announced his arrival with five good, hearty, sounding raps at the door.

Ferguson opened, in person.

"Dick! you here?" he exclaimed, but with no great expression of surprise, after all.

"Dick himself!" was the response.

"What, my dear boy, you at London, and this the mid-season of the winter shooting?"

"Yes! here I am, at London!"

"And what have you come to town for?"

"To prevent the greatest piece of folly that ever was conceived."

"Folly!" said the doctor.

"Is what this paper says, the truth?" rejoined Kennedy, holding out the copy of the Daily Telegraph, mentioned above.

"Ah! that's what you mean, is it? These newspapers are great tattlers! But, sit down, my dear Dick."

"No, I won't sit down!—Then, you really intend to attempt this journey?"

"Most certainly! all my preparations are getting along finely, and I—"

"Where are your traps? Let me have a chance at them! I'll make them fly! I'll put your preparations in fine order." And so saying, the gallant Scot gave way to a genuine explosion of wrath.

"Come, be calm, my dear Dick!" resumed the doctor. "You're angry at me because I did not acquaint you with my new project."

"He calls this his new project!"

"I have been very busy," the doctor went on, without heeding the interruption; "I have had so much to look after! But rest assured that I should not have started without writing to you."

"Oh, indeed! I'm highly honored."

"Because it is my intention to take you with me."

Upon this, the Scotchman gave a leap that a wild goat would not have been ashamed of among his native crags.

"Ah! really, then, you want them to send us both to Bedlam!"

"I have counted positively upon you, my dear Dick, and I have picked you out from all the rest."

Kennedy stood speechless with amazement.

"After listening to me for ten minutes," said the doctor, "you will thank me!"

"Are you speaking seriously?"

"Very seriously."

"And suppose that I refuse to go with you?"

"But you won't refuse."

"But, suppose that I were to refuse?"

"Well, I'd go alone."

"Let us sit down," said Kennedy, "and talk without excitement. The moment you give up jesting about it, we can discuss the thing."

"Let us discuss it, then, at breakfast, if you have no objections, my dear Dick."

The two friends took their seats opposite to each other, at a little table with a plate of toast and a huge tea-urn before them.

"My dear Samuel," said the sportsman, "your project is insane! it is impossible! it has no resemblance to anything reasonable or practicable!"

"That's for us to find out when we shall have tried it!"

"But trying it is exactly what you ought not to attempt."

"Why so, if you please?"

"Well, the risks, the difficulty of the thing."

"As for difficulties," replied Ferguson, in a serious tone, "they were made to be overcome; as for risks and dangers, who can flatter himself that he is to escape them? Every thing in life involves danger; it may even be dangerous to sit down at one's own table, or to put one's hat on one's own head. Moreover, we must look upon what is to occur as having already occurred, and see nothing but the present in the future, for the future is but the present a little farther on."

"There it is!" exclaimed Kennedy, with a shrug. "As great a fatalist as ever!"

"Yes! but in the good sense of the word. Let us not trouble ourselves, then, about what fate has in store for us, and let us not forget our good old English proverb: 'The man who was born to be hung will never be drowned!'"

There was no reply to make, but that did not prevent Kennedy from resuming a series of arguments which may be readily conjectured, but which were too long for us to repeat.

"Well, then," he said, after an hour's discussion, "if you are absolutely determined to make this trip across the African continent—if it is necessary for your happiness, why not pursue the ordinary routes?"

"Why?" ejaculated the doctor, growing animated. "Because, all attempts to do so, up to this time, have utterly

failed. Because, from Mungo Park, assassinated on the Niger, to Vogel, who disappeared in the Wadai country; from Oudney, who died at Murmur, and Clapperton, lost at Sackatou, to the Frenchman Maizan, who was cut to pieces; from Major Laing, killed by the Touaregs, to Roscher, from Hamburg, massacred in the beginning of 1860, the names of victim after victim have been inscribed on the lists of African martyrdom! Because, to contend successfully against the elements; against hunger, and thirst, and fever; against savage beasts, and still more savage men, is impossible! Because, what cannot be done in one way, should be tried in another. In fine, because what one cannot pass through directly in the middle, must be passed by going to one side or overhead!"

"If passing over it were the only question!" interposed Kennedy; "but passing high up in the air, doctor, there's the rub!"

"Come, then," said the doctor, "what have I to fear? You will admit that I have taken my precautions in such manner as to be certain that my balloon will not fall; but, should it disappoint me, I should find myself on the ground in the normal conditions imposed upon other explorers. But, my balloon will not deceive me, and we need make no such calculations."

"Yes, but you must take them into view."

"No, Dick. I intend not to be separated from the balloon until I reach the western coast of Africa. With it, every thing is possible; without it, I fall back into the dangers and difficulties as well as the natural obstacles that ordinarily attend such an expedition: with it, neither heat, nor torrents, nor tempests, nor the simoom, nor unhealthy climates, nor wild animals, nor savage men, are to be feared! If I feel too hot, I can ascend; if too cold, I can come down. Should there be a mountain, I can pass over it; a

precipice, I can sweep across it; a river, I can sail beyond it; a storm, I can rise away above it; a torrent, I can skim it like a bird! I can advance without fatigue, I can halt without need of repose! I can soar above the nascent cities! I can speed onward with the rapidity of a tornado, sometimes at the loftiest heights, sometimes only a hundred feet above the soil, while the map of Africa unrolls itself beneath my gaze in the great atlas of the world."

Even the stubborn Kennedy began to feel moved, and yet the spectacle thus conjured up before him gave him the vertigo. He riveted his eyes upon the doctor with wonder and admiration, and yet with fear, for he already felt himself swinging aloft in space.

"Come, come," said he, at last. "Let us see, Samuel. Then you have discovered the means of guiding a balloon?"

"Not by any means. That is a Utopian idea."

"Then, you will go—"

"Whithersoever Providence wills; but, at all events, from east to west."

"Why so?"

"Because I expect to avail myself of the trade-winds, the direction of which is always the same."

"Ah! yes, indeed!" said Kennedy, reflecting; "the trade-winds—yes—truly—one might—there's something in that!"

"Something in it—yes, my excellent friend—there's EVERY THING in it. The English Government has placed a transport at my disposal, and three or four vessels are to cruise off the western coast of Africa, about the presumed period of my arrival. In three months, at most, I shall be at Zanzibar, where I will inflate my balloon, and from that point we shall launch ourselves."

"We!" said Dick.

"Have you still a shadow of an objection to offer? Speak, friend Kennedy."

"An objection! I have a thousand; but among other things, tell me, if you expect to see the country. If you expect to mount and descend at pleasure, you cannot do so, without losing your gas. Up to this time no other means have been devised, and it is this that has always prevented long journeys in the air."

"My dear Dick, I have only one word to answer—I shall not lose one particle of gas."

"And yet you can descend when you please?"

"I shall descend when I please."

"And how will you do that?"

"Ah, ha! therein lies my secret, friend Dick. Have faith, and let my device be yours—'Excelsior!'"

"'Excelsior' be it then," said the sportsman, who did not understand a word of Latin.

But he made up his mind to oppose his friend's departure by all means in his power, and so pretended to give in, at the same time keeping on the watch. As for the doctor, he went on diligently with his preparations.

Chapter Fourth.

African Explorations.—Barth, Richardson, Overweg, Werne, Brun-Rollet, Penney, Andrea, Debono, Miani, Guillaume Lejean, Bruce, Krapf and Rebmann, Maizan, Roscher, Burton and Speke.

The aerial line which Dr. Ferguson counted upon following had not been chosen at random; his point of departure had been carefully studied, and it was not without good cause that he had resolved to ascend at the island of Zanzibar. This island, lying near to the eastern coast of Africa, is in the sixth degree of south latitude, that is to say, four hundred and thirty geographical miles below the equator.

From this island the latest expedition, sent by way of the great lakes to explore the sources of the Nile, had just set out.

But it would be well to indicate what explorations Dr. Ferguson hoped to link together. The two principal ones were those of Dr. Barth in 1849, and of Lieutenants Burton and Speke in 1858.

Dr. Barth is a Hamburger, who obtained permission for himself and for his countryman Overweg to join the expedition of the Englishman Richardson. The latter was charged with a mission in the Soudan.

This vast region is situated between the fifteenth and tenth degrees of north latitude; that is to say, that, in order to approach it, the explorer must penetrate fifteen hundred miles into the interior of Africa.

Until then, the country in question had been known only through the journeys of Denham, of Clapperton, and of Oudney, made from 1822 to 1824. Richardson, Barth, and Overweg, jealously anxious to push their investigations farther, arrived at Tunis and Tripoli, like their

predecessors, and got as far as Mourzouk, the capital of Fezzan.

They then abandoned the perpendicular line, and made a sharp turn westward toward Ghat, guided, with difficulty, by the Touaregs. After a thousand scenes of pillage, of vexation, and attacks by armed forces, their caravan arrived, in October, at the vast oasis of Asben. Dr. Barth separated from his companions, made an excursion to the town of Aghades, and rejoined the expedition, which resumed its march on the 12th of December. At length it reached the province of Damerghou; there the three travellers parted, and Barth took the road to Kano, where he arrived by dint of perseverance, and after paying considerable tribute.

In spite of an intense fever, he quitted that place on the 7th of March, accompanied by a single servant. The principal aim of his journey was to reconnoitre Lake Tchad, from which he was still three hundred and fifty miles distant. He therefore advanced toward the east, and reached the town of Zouricolo, in the Bornou country, which is the core of the great central empire of Africa. There he heard of the death of Richardson, who had succumbed to fatigue and privation. He next arrived at Kouka, the capital of Bornou, on the borders of the lake. Finally, at the end of three weeks, on the 14th of April, twelve months after having quitted Tripoli, he reached the town of Ngornou.

We find him again setting forth on the 29th of March, 1851, with Overweg, to visit the kingdom of Adamaoua, to the south of the lake, and from there he pushed on as far as the town of Yola, a little below nine degrees north latitude. This was the extreme southern limit reached by that daring traveller.

He returned in the month of August to Kouka; from there he successively traversed the Mandara, Barghimi, and Klanem countries, and reached his extreme limit in the east, the town of Masena, situated at seventeen degrees twenty minutes west longitude.

On the 25th of November, 1852, after the death of Overweg, his last companion, he plunged into the west, visited Sockoto, crossed the Niger, and finally reached Timbuctoo, where he had to languish, during eight long months, under vexations inflicted upon him by the sheik, and all kinds of ill-treatment and wretchedness. But the presence of a Christian in the city could not long be tolerated, and the Foullans threatened to besiege it. The doctor, therefore, left it on the 17th of March, 1854, and fled to the frontier, where he remained for thirty-three days in the most abject destitution. He then managed to get back to Kano in November, thence to Kouka, where he resumed Denham's route after four months' delay. He regained Tripoli toward the close of August, 1855, and arrived in London on the 6th of September, the only survivor of his party.

Such was the venturesome journey of Dr. Barth.

Dr. Ferguson carefully noted the fact, that he had stopped at four degrees north latitude and seventeen degrees west longitude.

Now let us see what Lieutenants Burton and Speke accomplished in Eastern Africa.

The various expeditions that had ascended the Nile could never manage to reach the mysterious source of that river. According to the narrative of the German doctor, Ferdinand Werne, the expedition attempted in 1840, under the auspices of Mehemet Ali, stopped at Gondokoro, between the fourth and fifth parallels of north latitude.

In 1855, Brun-Rollet, a native of Savoy, appointed consul for Sardinia in Eastern Soudan, to take the place of Vaudey, who had just died, set out from Karthoum, and, under the name of Yacoub the merchant, trading in gums and ivory, got as far as Belenia, beyond the fourth degree, but had to return in ill-health to Karthoum, where he died in 1857.

Neither Dr. Penney—the head of the Egyptian medical service, who, in a small steamer, penetrated one degree beyond Gondokoro, and then came back to die of exhaustion at Karthoum—nor Miani, the Venetian, who, turning the cataracts below Gondokoro, reached the second parallel—nor the Maltese trader, Andrea Debono, who pushed his journey up the Nile still farther—could work their way beyond the apparently impassable limit.

In 1859, M. Guillaume Lejean, intrusted with a mission by the French Government, reached Karthoum by way of the Red Sea, and embarked upon the Nile with a retinue of twenty-one hired men and twenty soldiers, but he could not get past Gondokoro, and ran extreme risk of his life among the negro tribes, who were in full revolt. The expedition directed by M. d'Escayrac de Lauture made an equally unsuccessful attempt to reach the famous sources of the Nile.

This fatal limit invariably brought every traveller to a halt. In ancient times, the ambassadors of Nero reached the ninth degree of latitude, but in eighteen centuries only from five to six degrees, or from three hundred to three hundred and sixty geographical miles, were gained.

Many travellers endeavored to reach the sources of the Nile by taking their point of departure on the eastern coast of Africa.

Between 1768 and 1772 the Scotch traveller, Bruce, set out from Massowah, a port of Abyssinia, traversed the

Tigre, visited the ruins of Axum, saw the sources of the Nile where they did not exist, and obtained no serious result.

In 1844, Dr. Krapf, an Anglican missionary, founded an establishment at Monbaz, on the coast of Zanguebar, and, in company with the Rev. Dr. Rebmann, discovered two mountain-ranges three hundred miles from the coast. These were the mountains of Kilimandjaro and Kenia, which Messrs. de Heuglin and Thornton have partly scaled so recently.

In 1845, Maizan, the French explorer, disembarked, alone, at Bagamayo, directly opposite to Zanzibar, and got as far as Deje-la-Mhora, where the chief caused him to be put to death in the most cruel torment.

In 1859, in the month of August, the young traveller, Roscher, from Hamburg, set out with a caravan of Arab merchants, reached Lake Nyassa, and was there assassinated while he slept.

Finally, in 1857, Lieutenants Burton and Speke, both officers in the Bengal army, were sent by the London Geographical Society to explore the great African lakes, and on the 17th of June they quitted Zanzibar, and plunged directly into the west.

After four months of incredible suffering, their baggage having been pillaged, and their attendants beaten and slain, they arrived at Kazeh, a sort of central rendezvous for traders and caravans. They were in the midst of the country of the Moon, and there they collected some precious documents concerning the manners, government, religion, fauna, and flora of the region. They next made for the first of the great lakes, the one named Tanganayika, situated between the third and eighth degrees of south latitude. They reached it on the 14th of February, 1858, and visited the various tribes residing on its banks, the most of whom are cannibals.

They departed again on the 26th of May, and reentered Kazeh on the 20th of June. There Burton, who was completely worn out, lay ill for several months, during which time Speke made a push to the northward of more than three hundred miles, going as far as Lake Okeracua, which he came in sight of on the 3d of August; but he could descry only the opening of it at latitude two degrees thirty minutes.

He reached Kazeh, on his return, on the 25th of August, and, in company with Burton, again took up the route to Zanzibar, where they arrived in the month of March in the following year. These two daring explorers then reembarked for England; and the Geographical Society of Paris decreed them its annual prize medal.

Dr. Ferguson carefully remarked that they had not gone beyond the second degree of south latitude, nor the twenty-ninth of east longitude.

The problem, therefore, was how to link the explorations of Burton and Speke with those of Dr. Barth, since to do so was to undertake to traverse an extent of more than twelve degrees of territory.

Chapter Fifth.

Kennedy's Dreams.—Articles and Pronouns in the Plural.—Dick's Insinuations.—A Promenade over the Map of Africa.—What is contained between two Points of the Compass.—Expeditions now on foot.—Speke and Grant.—Krapf, De Decken, and De Heuglin.

Dr. Ferguson energetically pushed the preparations for his departure, and in person superintended the construction of his balloon, with certain modifications; in regard to which he observed the most absolute silence. For a long time past he had been applying himself to the study of the Arab language and the various Mandingoe idioms, and, thanks to his talents as a polyglot, he had made rapid progress.

In the mean while his friend, the sportsman, never let him out of his sight—afraid, no doubt, that the doctor might take his departure, without saying a word to anybody. On this subject, he regaled him with the most persuasive arguments, which, however, did NOT persuade Samuel Ferguson, and wasted his breath in pathetic entreaties, by which the latter seemed to be but slightly moved. In fine, Dick felt that the doctor was slipping through his fingers.

The poor Scot was really to be pitied. He could not look upon the azure vault without a sombre terror: when asleep, he felt oscillations that made his head reel; and every night he had visions of being swung aloft at immeasurable heights.

We must add that, during these fearful nightmares, he once or twice fell out of bed. His first care then was to show Ferguson a severe contusion that he had received on the cranium. "And yet," he would add, with warmth, "that