



## AN INTREPID TRAVELLER.

THE year of the birth of Alexander von Humboldt was remarkable as giving to the world various men who in widely different spheres became famous. It was 1769, the year in which Wellington, Napoleon, and Cuvier were born. The Humboldts were an old Pomeranian family, with a strong military dash in their blood. The grandfather of Alexander was a captain in that well-drilled army of Frederick William I. of Prussia, whose giant guard regiment excited the astonishment of Europe; and the philosopher's father, Alexander George von Humboldt, occupied the distinguished post of adjutant to Ferdinand of Brunswick, the hero of Minden, and of many another hard-fought field, during the great Seven Years' War. The little Alexander, with his elder brother, Wilhelm von Humboldt, afterwards distinguished for his classical and historical attainments, had the advantage of an excellent education.

The boys appear to have spent a

happy childhood at their father's old country home at Tegel, not far from Berlin, where Major von Humboldt, now in retirement after the close of the great war, was honoured annually by a visit from the Prince of Prussia, afterwards king under the title of Frederick William II. It is remarkable, and may perhaps be a comforting reflection to anxious parents and teachers who are apt to be discouraged by an absence of quickness of apprehension in boys, that Alexander von Humboldt was acknowledged to be slow at learning; so that even his mother and his tutor, who after the death of the Major watched carefully over the boys' progress, were fain to acknowledge that Alexander was dull of comprehension, and would probably not make a scholar.

A residence at the University of Frankfurt, on the Oder, then rising fast in reputation, afforded each of them an opportunity of following his peculiar bent of study; William inclining to classical literature and Alexander to science. After two years Alexander removed to Göttingen, then considered as

the most distinguished of the German seats of learning. The acquaintance of the celebrated naturalist Blumenbach, and still more that of George Forster, who had accompanied Captain Cook on his second voyage round the world in the capacity of botanist, and was never weary of relating the marvels of the tropical world, increased in the young student his longing for scientific exploration and adventure.

"From my earliest youth," he says, "I had felt an ardent desire to travel in distant regions seldom traversed by Europeans. This desire is characteristic of a period in our life, when such a prospect opens a boundless horizon before us, and nothing has a greater attraction for us than strong emotions of the soul, and the picture of physical dangers. Brought up in a country which maintains no direct communication with the two Indies, and afterwards a dweller among mountains that are far from the coast, and celebrated for the extensive mining operations carried on there, I felt an increasing passion for the sea and for long voyages developed within me. Those things with which we are acquainted through the lively representations of travellers have an especial charm for us; our power of imagination is attracted towards all that is indefinite and unlimited; the enjoyments that are denied to us appear more considerable than those within our reach during the daily course of a sedentary life." And thus, though this "sedentary life" of official duty was sweetened by all that fortune could give, with congenial occupation, and the society of such distinguished friends as Goethe and Schiller themselves, Humboldt resolutely determined to give up his appointment, to turn his back on the agreeable society-life of Germany, and to go forth as a pioneer of science into regions untrodde and unknown.

After various delays, caused by the unsettled state of Southern Europe,—for it was the time of Bonaparte's Italian and

Egyptian campaigns,—he started with his friend Bonpland on what proved a most important and remarkable voyage.

The starting-point was Corunna, in Spain; the date the 5th of June, 1799. Alexander von Humboldt had received from the King of Spain a most important concession, in the form of a royal permit to visit every part of the dominions of Spain in the New World. "Never had so extensive a permission been granted to any traveller," says Humboldt, "and never had any voyager been honoured with greater confidence on the part of the Spanish Government. To dissipate every doubt which the viceroys or captains-general representing the royal authority in America might entertain with respect to the nature of my labours, the passport of the Chief Secretary of State set forth that I was at liberty to make use of my scientific instruments, that I might make astronomical observations through the whole of the Spanish dominions, measure the height of mountains, examine the products of the soil, and execute all operations I might judge useful for the progress of the sciences." And indeed, this solemn permission in passport-form was not by any means superfluous; for the colonial Spaniards of those days looked with considerable jealousy upon visitors from Europe, to whose researches they obstinately insisted on attaching political rather than scientific motives.

From the day when the *Pizarro* ran out of the harbour of Corunna, Humboldt was indefatigable in investigating, comparing, and experimenting on the various phenomena of nature. Among his first observations, afterwards embodied in his "Personal Narrative," were very valuable remarks on ocean currents, especially on the Atlantic Gulf Stream. He points out how tropical plants, and waifs and fragments of ships and cargoes from the Antilles and the shores of the Gulf of Mexico, are carried across to North-western Europe by this great

“river in the sea;” how the wreck of the *Tilbury*, an English ship, drifted across from Jamaica to the coast of Scotland; how even canoes with American savages in them have come across the Atlantic to the Azores and the Canary Islands.

Fortune favoured the travellers. England and Spain were at that time at war; but no British cruiser fell in with the good ship *Pizarro*; and Teneriffe, and afterwards Cumana, on the American coast, were reached in safety.

The ascent of the Peak of Teneriffe drew the attention of Humboldt and his companion to a great point, which continued to be one of the chief subjects of the investigations of Humboldt during many years, and which he treated with wonderful clearness and force in a treatise on the structure and action of volcanoes in various parts of the world.

On the voyage from Teneriffe to Cumana, the travellers were impressed by the first sight of the Southern Cross, rising from the bosom of the waters; and remembered how the navigators of the fifteenth century, sailing forth into unknown seas, and losing sight of the familiar constellations that had shone down upon them like the eyes of friends, were comforted when this new group arose, exhibiting the form of the sacred symbol of Christianity to cheer and encourage them on their way.

The negroes round Cumana are noticed by Humboldt as shiftless, lazy, and unambitious—as negroes have ever proved themselves to be, the eulogies of enthusiastic partisans notwithstanding. The slaves were in a wretched condition, driven to their work like cattle, and utterly spiritless and wretched; the free negroes were apathetic and listless, too idle even to cultivate gardens for themselves, because they could get vegetables and fruit from Cumana in return for the fish they carried to the town for sale.

Here the travellers had their first experience of mountain journeying on horse-back, or rather on mule-back. The

initiation was useful, as a prelude to the experiences of travel among the mighty Cordilleras of the Andes. The sagacity of the mules excited the admiration of the travellers, who found it uniformly the best way to leave their four-footed bearer to his own resources, and trust him to bring them safely through all perils. In his personal narrative our traveller says: “It is on the frightful roads of the Andes, during journeys of six or seven months across mountains furrowed by torrents, that the intelligence of horses and beasts of burden displays itself in an astonishing manner. Thus the mountaineers are accustomed to say: ‘I will not give you the mule whose step is easiest, but him who reasons best.’ This popular saying, dictated by long experience, perhaps better combats the saying that makes animals mere living machines, than all the arguments of speculative philosophy.”

The second residence of the travellers at Cumana produced a startling incident, which might have given their scientific career as sudden and tragic a termination as that of Captain Cook. On the 27th of October, 1799, as they were walking at evening on the margin of the gulf, there rushed suddenly from a neighbouring thicket a half-naked coloured man, or “Sambo,” a half-breed between Indian and negro. This wretched native, who had, it appeared, been driven half mad by ill-treatment on board ship, and who, hearing the two friends speak French, mistook them for a couple of his oppressors, aimed a tremendous blow with a heavy club at Humboldt, who fortunately avoided it, and then struck Bonpland to the ground, stunned and bleeding, and endeavoured to follow up the attack with a long knife. Hereupon he fled, but was captured by some merchants who had seen the occurrence at a distance, and came running up to the rescue. Fortunately for the travellers, the miserable Sambo escaped from the prison where he had been laid by the heels to await his first examination.

The stream of justice flowed very tardily in those regions, and the travellers might have been detained for many months to give evidence against the poor wretch. Bonpland felt the effects of the assault for some time.

His companion utilised the time occupied by his friend's recovery for the observation of an eclipse of the sun.

The travellers now had occasion to make acquaintance with a somewhat startling incident of tropical life—an earthquake; and Humboldt graphically describes the impression made upon him when for the first time he felt the earth, naturally associated with the idea of firmness and stability, trembling beneath him. Afterwards during their residence at Quito, when from the great volcano of Pichinscha came the "formidas" or internal rumblings, the precursors of heavy earthquake shocks, lasting eight or nine minutes, they had become so accustomed to the phenomenon that they did not even rise from their beds; and at last were no more astonished at seeing the earth heaving around them than the sailor is to see the ocean rising in billowy waves. He was told that 1784 had been a year especially fertile in earthquake shocks; the Mexicans at that time had been as much accustomed to hear the subterranean thunder rolling beneath their feet as at others to hear it rumbling through the air.

Humboldt's account of the mighty Orinoco and the great rivers its tributaries, reads almost like a fairy tale. To him the vast treeless plains stretching away at a dead level to the horizon, with only banks or ridges of floetz rising here and there above the uniformity of the surface, suggested the idea of a petrified ocean; but like the ocean it is far from being devoid of life.

In the llanos the cattle struggle on against difficulties and dangers of the most opposite kinds. The drought of summer converts the plains into arid

deserts, and numbers of creatures perish for want of water. The cunning mule obtains a supply from the melocactus, a globular plant covered with thorny spikes, and containing a watery pulp. Many mules are seen lamed from thorns in the feet by kicking these plants open. The sufferings endured by the animals, when the rivers have become dry water-courses, are pitiable, the stings of myriads of insects greatly increasing them. Then comes the wet season, and the whole region is converted into a swamp, with great lakes, from which the higher portions stand out in the form of islands. Then the cattle have to live like amphibious animals, swimming from island to island, and menaced by alligators and jaguars; while the formidable gymnotus, or electric eel, lurking in the water, destroys many of them, stunning or numbing them with repeated shocks. In no part of the world does nature appear in more wonderful diversity of climate, or exhibit a greater and more marvellous fulness of animal life, than in these vast llanos of Venezuela.

The ascent of the mighty Cordilleras, of the Andes, including that of the mighty Chimborazo, the Snow Mountain, which Humboldt was the first to climb, formed another part of the enterprising traveller's experience; and here he noticed the wonderful diversity of plant-life under the same parallel of latitude at different elevations above the sea level. From the hot valleys, where the vegetation is entirely tropical, as the traveller ascends to the higher regions, he passes, by regular gradations, through districts exhibiting in a series the plants first of the temperate and then of the cold regions; at length arriving at the heights where a few lichens and mosses are the last representatives of the vegetable world before he reaches the region of perpetual snow. The remarkable distribution of animals also excited his wonder—the highest peaks of the Andes and the depths of hot springs alike



ATTACKED BY A JAGUAR.

exhibited traces of animal life in various forms.

Humboldt conceived the idea of establishing his residence in the French metropolis. After an excursion into Italy for scientific purposes, and a visit to Berlin, which capital he found in the possession of the French, he carried this design into effect; and until 1827 he resided mostly in Paris, occupied in the task of preparing for the press, revising and publishing the account of his travels.

He devoted the remainder of his fortune to the expenses of publishing in twenty-nine volumes, some written in French, others in Latin, a splendid collection of narratives, treatises, and notes embodying the results of his travels and researches in the New World. The work was enriched with more than fourteen hundred engravings, many of them coloured; and the expense from first to last amounted to £45,000.

And now, when he had almost entered upon his sixtieth year, the grand old scholar prepared for a new and arduous course of travel. It was to the Ural Mountains, and thence to the vast regions of Central Asia, and the mighty range of the Altai, that his unwearied energy now led him. In 1828, the Czar Nicholas of Russia made a proposition that Humboldt should undertake a comprehensive journey through his empire, at the sole expense of the Russian Crown.

In this second great journey Humboldt was accompanied by two most efficient coadjutors, Gustav Rose and Ehrenberg.

Provided with all that Imperial hospitality and patronage could afford, they quitted St. Petersburg on the 20th of May, to make their way to Moscow over the Ural range.

The energy and activity displayed by Humboldt, who was now sixty years old, during this remarkable journey, are sufficiently attested by the fact that within the short period of eight months and a-half he had traversed by land a distance of more than eleven thousand

geographical miles, or nearly half the extent of the earth's surface measured round the equator. By the end of December he was back again in St. Petersburg, having completed one of the most remarkable land-journeys of modern times.

After the death of Frederick William III., that monarch's successor, the late King Frederick William IV., continued to treat the now aged philosopher with marked distinction, and at various times employed him on diplomatic missions of honour and importance, especially to Paris. The King took especial pleasure in Humboldt's society, and chose him as his travelling companion on his visit to England in 1841, and to Denmark in 1845.

At the age of ninety years, full of days and honour, Alexander von Humboldt was laid at last in the grave of his family at Tegel, on the 11th of May, 1859. He was never married. The chief possession he left behind him, his valuable library, he had bequeathed to his faithful servant, assistant, and friend, Seiffert, the companion of his travels.

The following extract, descriptive of the great treeless llanos or steppes of Venezuela, is taken from the "Aspects of Nature." It will give an idea of the author's picturesque style in the description of natural scenes:—

"Separated by days' journeys from each other, huts are found, constructed of bundles of reeds bound together with thongs, and roofed with ox hides. Countless herds of wild cattle, horses, and mules swarm in the steppes. Forests, thousands of years old, and an impenetrable gloom cover the moist region that surrounds the desert; and mighty granitic masses narrow the beds of the foaming rivers. The wood resounds with the thunder of falling waters, the roaring of the jaguar, and the dull howling of the apes. Where the shallow stream leaves a sandbank exposed, lie outstretched, motionless as masses of rock, with open jaws, and frequently

covered with birds, the clumsy bodies of the crocodiles; its tail rolled round the branch of a tree, lurks by the bank, certain of its prey, the chequered boa. Stretching suddenly forward, it seizes in the track the young bull or the weaker game, and forces its prey, covered with saliva, down its distended throat. But when, beneath the perpendicular rays of the never-clouded sun, the burnt-up grassy surface has crumbled into dust, the hardened ground gapes open, as if shattered by a mighty earthquake; like rushing water-spouts opposing currents of air spring upward in funnel shape; a dull straw-coloured twilight is spread by the apparently lowering sky over the desert plain; the view suddenly narrows, and as the plain contracts, the heart of the wanderer sinks within him. The hot, dusty sand, floating in the misty, veiled horizon, increases the sultriness of the pestilential air.

As the animals in the icy north grow torpid through cold, so here the crocodile and the boa slumber motionless, buried deep in the dry clay. Everywhere drought signifies death, everywhere the thirsty creature is pursued by the delusive ærial mirage of a waving mirror of waters. With thick clouds of dust whirling round them, and tormented by burning thirst and by hunger, the horses and oxen roam to and fro, the latter with frightened roar, the former with outstretched necks snuffing the wind to detect, by the dampness of the current of air, the proximity of some water-puddle not yet entirely evaporated. When the burning heat of day is succeeded by the coolness of the night of equal length, even then horses and oxen cannot enjoy their rest. Enormous bats suck their blood in vampire fashion, attaching themselves closely to their backs, where they cause festering wounds, into which swarms of stinging insects penetrate. When at length, after a long drought the beneficent rainy season succeeds, the scene suddenly changes. The deep blue

of the till then unclouded sky becomes at once overcast. At night the weak light in the constellation of the Southern Cross can barely be recognised. The soft phosphoric gleam of the magellanic clouds is extinguished, even the constellations of the Eagle and of Ophiucus in the zenith glimmer with a trembling light. Some scattered clouds in the south appear like distant mountains, and the vapours spread like mists over the zenith, and distant thunder announces the vivifying rain. Hardly has the surface of the earth been moistened before the fragrant steppe is covered with the most various kinds of grasses. Excited by the light, herb-like mimosas unfold their slumbering leaves, and welcome the rising sun, together with the morning song of the birds and the opening blossoms of the aquatic plants. Horses and oxen now pasture in the full enjoyment of life. But in the grass that shoots up high lurks the beautifully-spotted jaguar, that springs cat-like with airy bound upon the animals as they pass by. Sometimes, on the margin of the swamp, the moistened clay is seen slowly rising upward in clods—with a violent noise, as at the outbreak of the little mud volcanoes, the upheaved earth is hurled high into the air;—those who understand the meaning of it flee from the appearance, for a gigantic water-snake or a mailed crocodile comes forth from the depths, awakened from a trance by the down-pour of rain. As the rivers gradually swell, nature forces the same animals that during the first half of the year were fainting with thirst on the dusty parched earth, to live like amphibious creatures—for a portion of the steppe now appears like an enormous lake. The mares take refuge with their foals on the higher banks, that stand forth like islands above the mirror of waters. Every day the dry space becomes narrower. For want of pasture the crowded animals have to swim about for hours together, cropping a bare subsistence from the

blossoming grass that rises above the brown-coloured turbid water. Many foals are drowned; many are caught by the crocodiles, crushed by the pointed teeth, and then devoured. Not unfrequently horses and oxen are seen that have escaped from the jaws of these rapacious lizards, and still carry on their bodies scars from crocodiles' jagged fangs.

But as in these steppes tigers and crocodiles fight with horses and oxen, so in certain parts of this wilderness we likewise see man in continual combat against his fellow. With unnatural greed the tribes drink the blood of their enemies—others, apparently weaponless, yet equipped for murder, slay their foe with a poisoned thumb-nail. The weaker hordes, when they pass along the sandy shore, carefully, with their hands, efface the marks of their timid footsteps, to conceal them from the stronger tribes. Thus man, in the lowest state of brutal savagery, as in the fictitious glory of higher civilisation, everywhere prepares unrest for himself in life—thus the wanderer in distant regions, crossing land and ocean, like the historical investigator searching the records of the ages, everywhere encounters the lamentable spectacle of a race divided against itself. And, therefore, he who amid the yet unsettled strife of nations longs for spiritual repose, gladly casts down his eyes to contemplate the peaceful life of plants, and the inner working of the holy power of nature;—or, following the innate impulse that has glowed for centuries in the human heart, he fixes his gaze upwards, on the distant stars that in undisturbed harmony sweep onward in their ancient unchanging course."

The following is Humboldt's picture of the nocturnal life of animals on the banks of the great rivers of South America:—

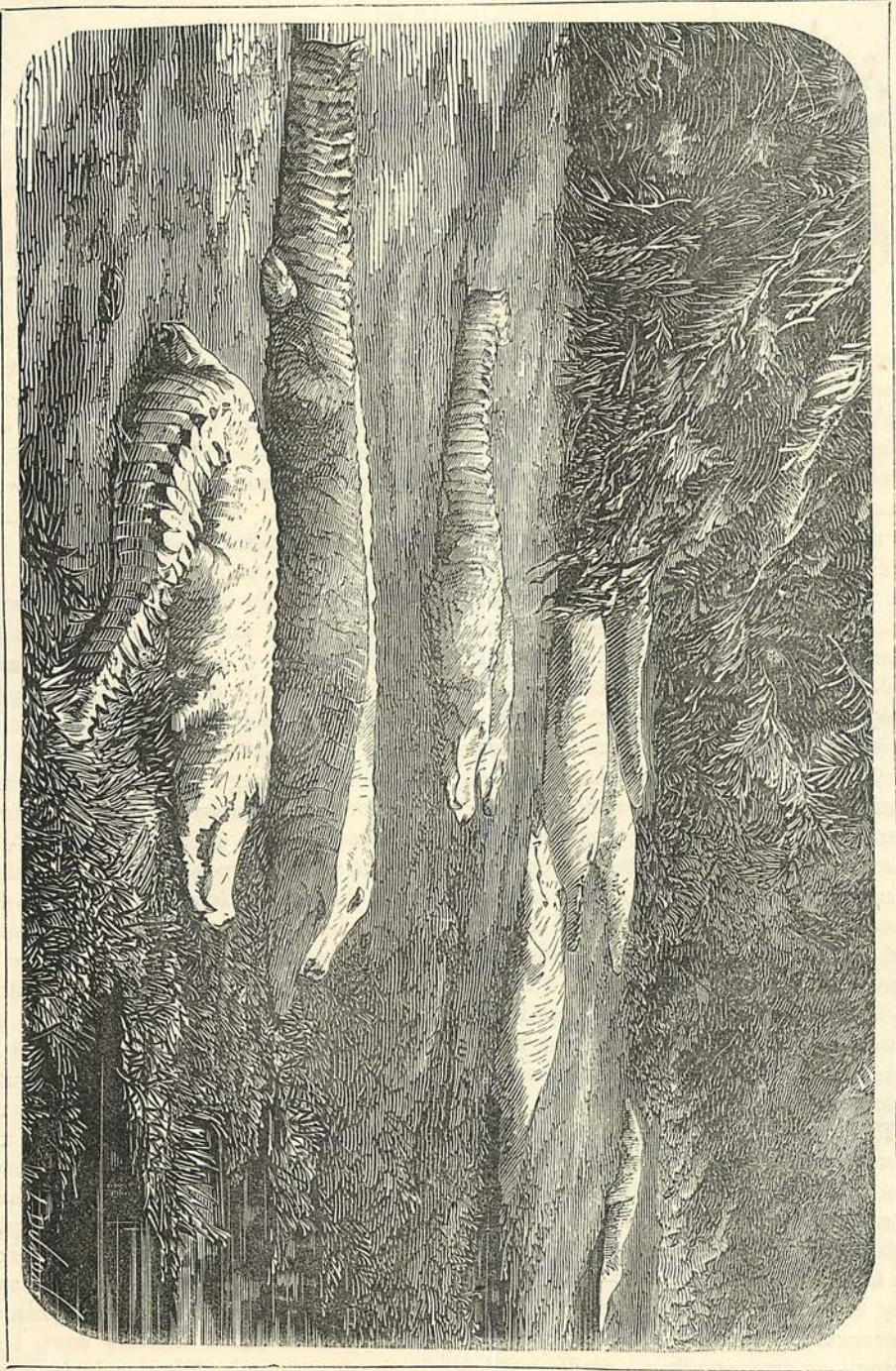
"Below the mission of Santa Barbara de Arichuna we passed the night, as usual, in the open air, on a sandy flat on the bank of the Apure, skirted by the

impenetrable forest. We had some difficulty in finding dry wood to kindle the fires with which it is here customary to surround the bivouac as a safeguard against the attacks of the jaguar. The air was bland and soft, and the moon shone brightly. Several crocodiles approached the bank; and I have observed that fire attracts these creatures as it does our crabs and other aquatic animals. The oars of our boats were fixed in the ground to support our hammocks. Deep stillness prevailed, only broken at intervals by the blowing of the fresh-water dolphins, which are peculiar to the river network of the Orinoco, as, according to Colebrooke, they are also to the Ganges, as high up the river as Benares; they followed each other in long rows.

After eleven o'clock, such a noise began in the adjacent forest, that for the remainder of the night sleep was impossible. The wild cries of animals resounded through the woods. Among the many voices which echoed together, the Indians could only recognise those which, after short pauses, were heard singly. There was the plaintive, monotonous cry of the howling monkeys, the whining flexible notes of the little sapagous, the grunting murmur of the striped nocturnal ape, the fitful roar of the great tiger (jaguar), the cougar, or maneless American lion, the peccary, the sloth, and a host of parrots, parraquas, and other birds of the pheasant kind. Whenever the tigers approached the edge of the forest, our dog, which before had barked incessantly, came howling to seek protection under the hammocks. Sometimes the cry of the tiger resounded from the branches of a tree, and it was then always accompanied by the plaintive piping tones of the apes, which were endeavouring to escape from the unwonted pursuit.

The Indians say that the animals rejoice in the beautiful moonlight, and celebrate the return of the full moon."





THE MID-DAY SIESTA.