

CHAPTER VII

THE REAWAKENING: SCIENTIFIC EXPLORATION

IN the absence of records for the period 1844-9 we are unable to trace the outside influences, if any, which again stirred Galton's latent scientific tastes, awakening once more those instincts for the production of work of social value, which for six years had been lying fallow. We do not suggest that these years were without any profit for Galton's ultimate career. The accumulation of experience—however apparently aimless—is always capital of a final interest-bearing value to the man who has by heredity a receptive mind and an unusual power of storing observation. The knowledge gained hap-hazard in the Soudan and Syria, the pursuit of grouse on the Scottish and Yorkshire moors¹, the shooting of seals in the Hebrides, the observation of bird and beast, the ready presence of mind, which the hunting field encourages², the knowledge of human motive and human weakness in the gambling, wine-loving, tale-capping³ set of the Hunt Club at Leamington, whose typical representatives were the Jack Myttons, father and son⁴,—all these experiences were not without profit in later life. Even their value in African travel was not to be despised; it is only their incongruity with the youth of 1840 and the man of 1850,

¹ Well for Galton that it was before the days of the modern "drive"!

² In later years Galton with characteristic modesty and the love of a joke even at his own expense, would say that he had learnt by experience to reduce falling off to a fine art.

³ The relief at hearing the simple truth told in simple words was, Galton once remarked, one of the new and pleasurable experiences associated with the family circle which his marriage introduced him to.

⁴ The life of Jack Mytton, Senior, has been written by "Nimrod" (J. C. Apperley) under the title: *The Life of John Mytton Esq., of Halston, Shropshire, with his Hunting, Racing, Shooting, Driving and Extravagant Exploits* (with colour illustrations by Alken and Rawlins). Jack Mytton, Junior, inherited his father's recklessness; he also got through a fortune and died prematurely. "There was no question of his ability or power over others," wrote Galton in his *Memories*, p. 110.

which must puzzle the onlooker unacquainted with that strange mixture of Stuart and Barclay, of Colyear and Darwin blood.

The first sign of the reawakening of the old tastes is the endeavour of Galton in 1849 to design a printing telegraph. The account of this instrument was printed in 1849, but post-dated in the publication June 1850, two months after Galton had left for Africa. The pamphlet gives very extensive details of the mechanical parts of the apparatus. In order to appreciate what the "telotype" meant in those days, we must remind the reader that telegraphy, then recently introduced into this country, was not carried on by the Post Office but by a number of commercial companies, and a printing telegraph had not yet been achieved. Galton's instrument looks cumbersome with our modern experience of tape instruments, but there are some ingenious ideas involved. How far it was ever actually constructed it is now perhaps impossible to say, but from the wording it might be supposed that portions at least had been actually made; Galton speaks of the instrument as the result of many *experiments*¹, and dealing with his method of intensifying the mechanical effect of the slight touch of a needle he writes:

"It is very interesting to watch such a series in operation; how the delicate, scarcely perceptible touch of the first arm causes an influence that travels on, almost as if by instinct through the whole series; how each arm hands it to the one beyond it; its available power increasing at each delivery²."

If the whole or parts were constructed, they do not appear to have been preserved, or at least to have reached the Galton Laboratory with the long series of his models and other instruments, which we possess. Galton's telotype involves three wires to connect sending and receiving stations. The needle of a galvanometer may remain stationary, turn to right or turn to left. Thus each wire can send three signals, or the system of three wires 27 signals, enough for the complete alphabet. Now consider a lever in the form of a rectangular frame balanced about a median line or axis; suppose a key slightly longer than the parallel sides of the rectangle turning on the same axis, then if the frame be horizontal and the key pass over the perpendicular edge of the side of the frame it will depress it, when itself depressed. The depression causes contact

¹ *The Telotype: a printing Electric Telegraph*, by Francis Galton, Esq., M.A., Trin. Coll., Cambridge. John Weale, 1850, p. 32.

² *Ibid.*, p. 10.

Plate LV bis



MILLICENT ADELE GALTON (1810—1883).
“Sister Dolly.”



EMMA SOPHIA GALTON (1811—1904).
“Sister Penny.”

From early photographs (before 1860) on glass in the possession of their niece, Mrs T. J. A. Studdy.

and a positive current is transmitted. If a piece of the breadth of the key be cut out of the edge of the frame of depth equal to the play of the key, no motion of the lever takes place. A second similar rectangular frame inside the first may be depressed and give a negative current, or again may have a piece cut out and give no current at all. Thus one key depressed can give any of the three possible signals on the first wire. With three pairs of such rectangular frames and 27 keys all the possible combinations of signals can be sent through the triple wire. The keys may be given any letters or numbers, four wires and eight rectangular level frames on the same axis would give 81 signals. Elsewhere in the paper (p. 29) Galton indicates how with eight frames, two wires only, but two battery strengths for each wire, five signals might be got on each wire and so twenty-five signals in all. This roughly describes his third section, the determination of the proper movements of the needles for any given letter by touching a key. In his first section he considers how the weak movements of a needle may govern the movements of a heavy arm. He does not achieve this, as we might anticipate, by electromagnets, but, discarding these, by a somewhat elaborate mechanical device, which directs in a given manner the energy of wheels kept rotating as nearly uniformly as possible. We must refer the reader for the details of this part of the telotype, as well as for those of the manner in which the appropriate letters are to be actually printed, to the pamphlet itself; they have now only historical interest, but they suffice to indicate a mechanical versatility which was later to come to fuller fruition. Various additional possibilities are then indicated, thus, on making certain signals, mechanical effects other than printing letters, *e.g.* the sounding of a bell, can be obtained; methods are given by which the combination of one signal followed by a letter shall print a capital or a figure; and again processes for messages to be printed in cipher are indicated.

Lastly Galton's concluding words may be cited here, for they anticipate much that was to come later—the transference of the telegraphs to the Post Office, and the modern development of the telephone:

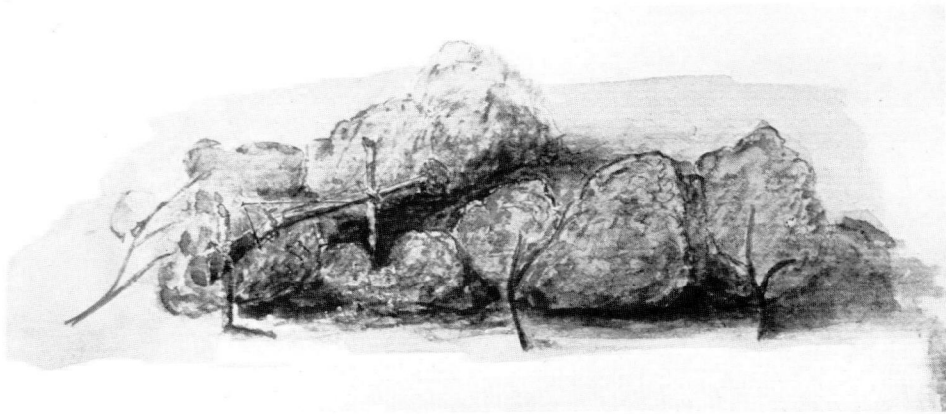
“If telegraphs, that worked and printed satisfactorily were once found practicable, most large houses, public and private, would soon become supplied with them. The communication being so immediate, answer following question as soon as it is put, affords much more nearly the advantage of a personal communication than the best regulated post office ever could. Any scheme to introduce telegraphs generally, would

probably be first confined to London. There would be central offices, and from these bundles of wires would radiate to numerous branch offices; from the branch offices again wires would pass along the adjacent streets, and supply houses as they passed. The expense of distributing wires in this way could not be extreme, for, if the branch offices were as numerous as the branch post offices now are, the distance that the wires to each private house would have to traverse would never be great" (p. 32).

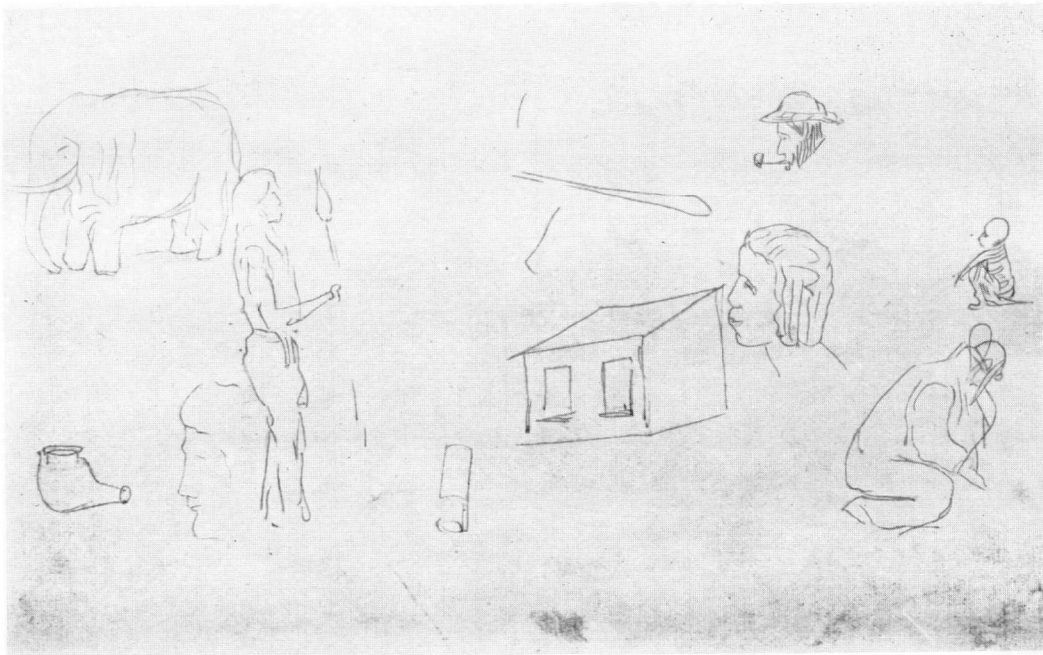
The perfect system of house to house telegraphy will probably only be reached when we return to the recorded signal, to the true telegraph, to the written instead of the spoken word. But in a large measure Galton's anticipation of 1849 has been realised. Before, however, the world could express any opinion on the value of his telotype, the "spring-fret" had again seized him. Galton was off for the "misty sweat bath 'neath the line," but this time with a definite end to his travels—the exploration of a little known tract of Tropical Africa. When and how the idea of a journey of exploration in Africa occurred to Francis Galton we cannot now ascertain; the reader will remember his boyish admiration for Captain Sayers (see p. 113), which was doubtless not without permanent influence. Oswell, Murray and Livingstone had just reached Lake Ngami, proceeding from the Cape, while ten years earlier Captain (later Sir) James E. Alexander, starting also from the Cape, had twice traversed the country of the Great Namaquas, and travelling almost due east and west along Lat. 23° S. had linked Walfisch Bay with the country of the Damaras of the Hills. North of 23° S. from Walfisch Bay to Lake Ngami, of the land of the Damaras of the Plains and of the Ovampos, but little was known; it was to this land that Galton's attention was ultimately directed. Oswell and Livingstone were already at work to the north of Lake Ngami, and there seems little doubt that Galton for a considerable time had in mind the linking up of the districts traversed by them with the West Coast. But this was hardly his original project; that appears to have been to reach Lake Ngami from the Cape and then proceed northward by means of the rivers flowing into that lake¹. For this purpose his equipment contained originally two boats which were discarded at the Cape. Galton's friend, Dalyell, was acquainted with Sir Roderick Murchison, at that time President of the Royal Geographical Society; Galton's cousins Charles Darwin and Captain Douglas Galton were

¹ Colborne's *New Monthly Magazine*, November 1850, p. 350.

SKETCHES FROM GALTON'S AFRICAN DIARIES.



Photograph of a rough water-colour sketch of gun set as a trap for a lion ; the beast in pulling off the lump of meat at the muzzle discharges the gun.



Sample page of one of Galton's diary-sketchbooks, illustrating his pencil snapshots.

fellows, and at the suggestion of the latter, Galton consulted the officials of the Society as to his journey. He was elected a member in the spring of 1850 and thus begun his relationship to the Royal Geographical which lasted so many years. According to the minutes of the Society Galton submitted, on March 25, 1850, a scheme for his journey to the South African lake and the route he proposed to take. This paper was not published in the Society's *Journal* and it has not been possible to obtain access to the papers of that period in the Society's archives¹. The matter is probably of small importance, for had Galton gone up from the Cape to Lake Ngami, he would have found Livingstone already at work exploring the district he had thought of, and it was probably therefore providential that on his arrival at the Cape he found himself cut off from Ngami by the great trek of the emigrant Boers, who had "wrested the whole breadth of the habitable country north of the Orange River" and cut off all communication northward. After some doubts as to proceeding to Lake Ngami from the Portuguese settlements on the east coast, Galton determined on starting from Walfisch Bay on the west and crossing Damaraland. This roughly enabled him to fill in the unknown district between Alexander's west and east line, Livingstone's Lake Ngami work and the Portuguese possessions on the west coast, that is to say the upper half of the present German South-west African colonies. The account of Galton's journey was published by Murray in 1853², and a new edition by Ward, Lock & Co. in the Minerva Library of Famous Books in 1889³. A succinct account of the journey—Recent Expedition into the Interior of South-Western Africa—was given at meetings of the Royal Geographical Society, Feb. 23 and April 26, 1852, and is published in their *Journal*, vol. xxii, pp. 140—163. The paper which immediately follows this is by Livingstone and Oswell giving an account of their explorations to the north of Lake Ngami. A common map of the Galton and Livingstone explorations (p. 141) is of much interest

¹ I have to thank Dr J. Scott Keltie for most kindly examining the minutes of the Royal Geographical Society for the years 1850–2 for references to Francis Galton.

² *The Narrative of an Explorer in Tropical South Africa*, with coloured Maps, Plates and Woodcuts. One of the maps gives a most valuable scheme of the routes of various explorers up to 1851. The cuts are after sketches in Galton's note-books.

³ This edition has a most interesting Appendix by Galton on the later history of exploration, etc., in Damaraland. It wants, however, most of the cuts of the original and the small map is inferior.

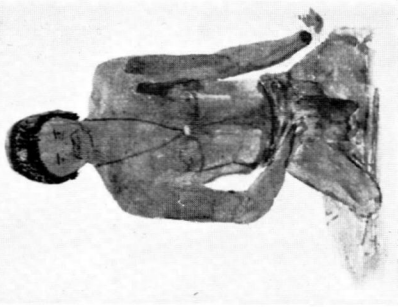
as showing the approach to Livingstone's ground that Galton made in his journey to 'Tounobis. The Geographical Society's *Journal* gives also his astronomical observations for six longitudes and the latitudes of 53 stations. The map was based chiefly on triangulation with an azimuth compass. The positions thus obtained were tested with the longitudes and latitudes taken astronomically. The agreement was on the whole fair, the longitudes (by lunars with a small circle) being least satisfactory; a result which will not surprise those who have used this method and remember that Galton's experience was chiefly, if not wholly, gained on board ship after sailing for the Cape. Galton's diaries, sketchbooks and observation books are now in the Galton Laboratory¹,

¹ Among the books in the Galton Laboratory are (i) a small note-book with MS. native grammar, abstracts of Vardon's and Oswell's travels, lists of right ascensions and declinations of stars, a small table of logarithms, etc. It records that Professor Owen wanted the heads of wart-hogs of various ages to study their teeth, also dried heads of ostriches, especially young ones. Receipt for preserving skins and note for making experiments why a water bird's plumage gets immediately wet after being shot, etc. (ii) A quarto book of triangulations, also latitudes and longitudes. It is started by a pen and ink sketch of a saddled ox, "Ceylon—the best hack in Africa." (iii) A folio book containing route distances, bearings, itineraries, sketches. History of the Namaqua atrocities before arrival of Galton; letters to or from Jonker, Swartboy, Amiral, Cornelius and other Hottentot and some Damara leaders. Jonker's signature to his "Apology," and the laws laid down for him, both in Dutch; fragments of diaries and other notes. A good deal might be of service to a future historian of German South-west Africa. There is a fairly extensive vocabulary. (iv) Ten small pocket note and sketch books. Sketches of native women and utensils, rough bearings and itinerary notes, journals, notes of necessities, of talks, further vocabularies, rough drafts for Galton's law-code for the Namaquas, etc., etc. (v) A tracing of a map of which the original was said to have been left at the Cape "7 years before," by the Rev. Mr Hahn of New Barmen, missionary. It shows a big lake, the "Demboa Sea," in Lat. 18° S. and about Long. 18° E. This is the lake to which Galton's letters several times refer but which he never really identified. If we were to trust the missionary's map, it would be as large as Lake Ngami itself! In a letter to Lord Campbell he supposes it Omanbonde, which is too far south. It might represent the Elosha salt-pan in the wet season, then "a rather pretty lake," much displaced and immensely exaggerated in area, but it was probably Onondova.

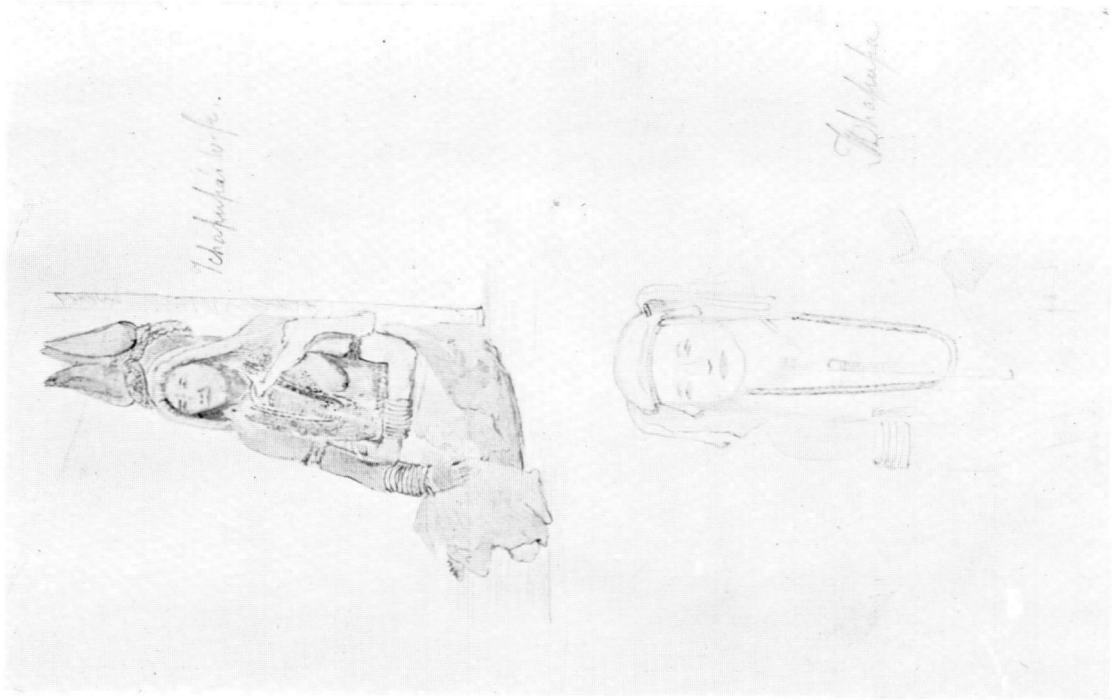
In (iii) is a loose pencil sketch of a small lake with steep cliff-like banks surmounted by trees, and entitled: *Omutchikoto, June 25, 1851*. This must be, I think, the Otchikoto, of Galton's map, reached at that date on the return journey. It is noted on the map as a small pond 400 ft. in diameter and 180 ft. deep. Galton writes: "There we took a day's rest, and amused ourselves in bathing. I made some fish-hooks out of needles, and caught about a hundred small fish, which we eat" (*Tropical South Africa*, 1st edn. p. 238). Otchikoto was reached on May 26, 1851, on the

SKETCHES FROM GALTON'S AFRICAN DIARIES.

Karupi



Karupi, an Ovampo.



Tchopupa's wife and Tchopupa, natives of Damaraland.



In 1907—8 a metallurgist travelling in Ovampoland saw Galton's name distinctly traced in light paint on the cliff a few feet above the water surface of this small lake (Omutchikola) at a point which could only be reached by swimming. (Letter from Professor H. H. W. Pearson, South African College, 1912.)

and before the writer of these lines; they indicate very fully the thoroughness with which he now went to work. Of the sketches we reproduce some in the Plates of this chapter, but it is not our intention here to rewrite or even to abstract the account of the African journey; we propose to bring the reader again in touch with Galton himself, chiefly by printing in part his letters home. They bear the mark of the immediate impression made upon him by his environment, and are largely written in the old playful strain of the Cambridge days. Individual occurrences are coloured with the feeling of the moment and by the writer's relation to the recipient, in a manner which must be set aside, when a serious narrative is written a year afterwards for the public eyes.

We now turn to the letters of this period.

Friday night [22nd March, 1850].

DEAREST MOTHER, I shall turn up some day next week but I cannot tell when. The "Dalhousie," my ship, is at anchor in the river now. The Captain's name is Butterworth and my books are at the Pantehnicon, Belgrave Square. Ever in great haste, Affectionately, F. G.

THE DALHOUSIE.

PLYMOUTH HARBOUR, *Tuesday [April 2].*

DEAREST MOTHER, I sha'nt, hang the ship, be off till Friday I fear, so I will write again. I came down from London by last night's mail train and am now fairly settled on board. It's blowing hard. Ever affectionately, FRANK GALTON.

OFF PLYMOUTH HARBOUR, *April 5, 1850.*

DEAREST MOTHER, At length we are off. You will soon receive 4 copies of my Telotype; keep one, send one to Darwin, one to Emma, and one to my most useful amanuensis and draughtswoman Anne Broadley¹. The weather has been very wild here, but has now reformed. Good bye for 4½ months when you will get my next letter. Ever affectionately, FRANK G.

outward journey (p. 200). The superstitions about it are like those of the Mummelsee in the Schwarzwald—*i.e.* no living thing which gets in ever gets out again. Galton, Andersson and Allen swam about the lake and astonished the natives, who had never seen swimming before. "We had great fun at Otchikoto, there was a cave there full of bats and owls, which we swam to and explored." The position appears to be about Long. 17°·5 E. and Lat. 19°·25 S. Professor H. H. W. Pearson of the South African College, most kindly reported to me in 1912, that the name GALTON had been recently found painted on a rock, only accessible by swimming, above a small lake in Damaraland. The letters appeared still quite fresh. I think this must be at Omutchikoto, otherwise Otchikoto: see Plate LVII.

¹ See p. 98.

LAT. 16 N., LONG. 20 W. *May 9th, 1850.*

DEAREST MOTHER, As there is a chance of our shortly meeting some ship homeward bound I write a few lines. I never enjoyed myself much more than I have done. Glorious weather, and to my unmitigated astonishment I find that a ship is not always in this position [sketch of a three-master going bow first down the flank of a wave of 30°] or in this [same three-master going up the front of a wave of 45°]. The fact is that a large ship like the one I am in hardly moves at all except in very bad weather and the sea scarcely ever washes over her. At starting we had very bad weather and were about 10 days in the Bay of Biscay. A poor girl, a passenger, a clergyman's daughter, who was going out to settle with her brother at the Cape caught a severe inflammation of the lungs and died there. Our passengers make a very amusing party, and the time passes as pleasantly as can be. I am quite a good hand at taking observations¹ and have learnt about 600 Sichuana words² (the language I shall have to speak). Andersson is a very good fellow. I keep him in excellent order. He rammed a harpoon almost through his hand the other day, but he is a sort of fellow that couldn't come to harm. He had an old gun burst whilst firing it last week and only shook himself and all was right. I don't know if I told you that I called on his aunt just before starting. She knew Adèle at Swansea. Miss Elizabeth Lloyd tea-ed with her there. We passed under the sun the day before yesterday. It's not a bit hot. Thermometer has never been more than 80° in the shade. I should like yachting, I think, and I should go to Teneriffe and then the Verde Islands, doing Lisbon on the way; they looked so uncommonly pretty. Teneriffe would not be on an average 19 days from England. Suggest it to Darwin, if he is seized with a mania that way this spring. I was only sick three days.

May 10. Lat. 9½ N., Long. 24 W. There is a sail just reported ahead, and they are bellowing out to get ready and board her. It's very odd how few ships one sees, this is only the first homeward bound we have yet come across; however the tracks outward and homeward are different on account of the winds. The emigrants are rather fun than otherwise. I introduced the game of bob-cherry for the boys and every evening we filled our pockets full of things at dessert and fish away. We have made them sing together, etc., etc., but on the whole they are an uninteresting set of cubs. I have got to polish up to go on board, as I have been in slippers and a leather coat for the last fortnight. So good bye, and with love to all at Edstone³, Smitterfield⁴, and Adèle. Ever affectionately, FRANK G. Tell Emma that I am working hard at drawing.

The latitudes suggest the "Dalhousie" was off the Gold Coast and had not yet passed the line.

¹ The advantages of a sailing ship over a modern steamer for a traveller of those days will be obvious.

² Several pages of the diary contain long lists of words.

³ The home for a time of Darwin Galton, who had married Mary Elizabeth, eldest daughter and coheirress of John Phillips, Esq., of Edstone.

⁴ The home for a time of sister Bessy, Mrs Wheler.

CAPE TOWN, CAPE OF GOOD HOPE. *8th July, 1850.*

DEAREST MOTHER, We arrived here safely and all well a fortnight ago—and this is the first mail that has left since then, so that what with our very long passage and the other delay, you will I fear have wondered where in the world I am. I found I had letters of introduction to everybody worth knowing in Cape Town. Sir Harry Smith is most civil, and I feel just as much at home here as in Leamington. Andersson is a right good fellow and particularly well. He desires to be very kindly remembered to all of you. I found out an old Leamington acquaintance of yours, or rather she found me out, a Mrs Menzies, who was there in 1840 and knew Admiral Christian well. She is the wife of the Chief Justice here and is a particularly nice person. I daresay Emma will recollect her. My old ally, Hyde Parker is here in command of a ship and has just taken some prizes—another friend also, a Cantab whom I had my Xmas dinner with, on the Nile, is settled here. The news as regards my future plans, is somewhat chequered: Four days after I arrived news came from the frontier, that the Rebel Dutchmen (Boers they call them) had entirely stopped every route, and were on the point of themselves, going immediately to the Lake in order to keep it for themselves and had stopped parties of English Travellers and robbed them. My plans have been therefore changed. I intend either to go round by Natal near Delagoa Bay, or else on the western coast by Walfisch Bay, so as to turn their flank. Government, *i.e.* Sir H. Smith, desires me to take some letters to the Chiefs about, with reference to this movement of the Boers—in order to resist them. It has been, and still may be for aught I know, seriously contemplated to annex this wide country to the Colony. Anyhow I shall know all about it in two days. I have offered to do whatever Government wishes, and I should not be surprised if I had orders of some importance to carry out. Till then as my plans are so unsettled I cannot say more but I am ready for a start any day and as soon as a decision is come to shall very likely be packed off at once; so I may have to leave Cape Town this week.

I have received no letter from England as yet. Please direct them, *Cape Town—Cape of Good Hope*, unless I write again to the contrary as I have no chance whatever of going within 500 miles of Colesberg. Andersson is delighted at the prospect of anything like a scrimmage—and the fact of there having been £1000 offered for the capture of one Boer, and £500 for another—on account of previous enormities quite unconnected with the present business gives an extra zest to the fun of his present destination.

If I go to Natal, I shall recollect to enquire about Darwin's protégé Mr Hume, and will report on the state of his farm. Sir H. Smith has a glorious team of beagles—they don't run half as fast as those at Edstone did, and if possible make more noise. They run about in front of Government House and have been trained to chivy any strange dog that may approach too near, which they do at full cry. Give my love to everybody—babies and all. I will write by next mail, which must leave in 10 days I should think.

Ever your affectionate son, FRANK GALTON.

WELCH'S HOTEL, CAPE TOWN. *August 5th, 1850.*

MY DEAR DARWIN, In an hour more and I shall be off, with I think nearly as efficient a lot of men and cattle, as could possibly be met with. I have been obliged to

freight a small Schooner to take me and my traps about 1000 miles up the Coast to Walfisch Bay where I land and go towards the interior. The assistance and kindness in every possible way, both of Government here and of all the people, has been extreme. I take out credentials for establishing friendly relations between our Government and different tribes, in opposition to the movement of these Dutch Boers, and they have given me an immense parchment passport, engrossed and in English, Dutch and Portuguese, with a hugh seal 8 inches in diameter, set in a tin box and dangling on to it, so I go as a great swell¹. Sir Harry made a long speech to me the other day after dinner at Government House, to say, I was a good fellow—and he spoke very kindly indeed.

Andersson is a right good fellow, and does whatever he is told, which is particularly convenient. My head-man is one of the best known servants in Cape Town. He is Portuguese—has travelled all his life, speaks Dutch and English perfectly and has always been liked by everybody. Then I have a Black, to look after my nine mules and horses. He calls me "Massa" and that also, is very pleasant. He is a tall athletic well built fellow, who has worked uncommonly well in Kaffir land. Next comes a smart lad to help him, and then I have 2 Waggon drivers and two leaders for the Oxen. One of the Drivers has worked 4 years together at a blacksmith's and waggon maker's shop here, and is a very good workman, so that he can repair anything that goes wrong in my waggons, and one of the leaders can also drive. Our party therefore consists of seven servants Andersson and myself, and except Juan, the head-man, their wages run from £3. 10. 0 to £1. 10. 0 a month. I have been obliged to lay in a very great quantity of stores, for the place where I am going to land, has no communication established with any other port, and nothing that is forgotten can be replaced, of these things about half go to exchange for oxen, of which there are plenty there, and to get me guides and so on, of the rest I leave one half as a depot at a missionary Station, so that I have always a place to fall back upon. If the roads are good, I go with my waggons and my cart, if there is doubt about water ahead, I send on my cart alone with the mule—and if the road is execrable, I hunt about for a better one, using my mules as pack animals. The country is utterly unvisited by any White, after the first 300 miles, no traveller or sportsman has ever been there at all, only a few missionaries and traders—but the universal account from the Natives is, that the further you go, the richer it becomes. There is this large reported lake, Lake Demboa, only 200 miles from the furthest missionary Station. It will be my first object to reach this, and trace the river that flows out of it, and which is said to be a branch of the Cunene to the sea, and if the river be as large and the country as fertile and healthy as it is declared by the natives to be, it will most assuredly rise soon to great importance. The Cunene is the river that bounds the Portuguese possessions on the West coast, to the South. I daresay I shall bring back a lot of ivory and gold dust from there, for I shall certainly swop any of my stores for them, if I can do so to advantage. I am comfortably provisioned, barring meat, for two years and have an immense quantity of the things, that these

¹ This remarkable document is now in the Galton Laboratory. According to Galton's own account the seal had originally been attached to a royal mandate creating a deputy or lieutenant-governor of the colony. Sir H. Smith wanted something to impress the natives, so he cut it off and attached it to the aforesaid parchment!

savages are understood principally to fancy. All this has cost a lot of money, but like buying a ship, unless she is wrecked, you will sell her again. I have been obliged to draw a bill on Barclay for £400 beyond my letter of credit, at 30 days sight, and I leave behind me about £350 in cash, to pay the wives and mothers of my men, in case of any possible emergency. I wrote duplicate letters to Barclay, which I gave my Bankers here, to send with the bills, to ask them to advance what balance there may be against me, at a usual rate of interest, but that if it was not convenient for them to do so, I had left a power of attorney with you, to sell out some shares and requested them in that case to communicate with you. But I hope they will advance the tin, as it is a bore selling, and I cannot draw any more money, till I come back. I take £50 in my pocket in case of any possible accident, but I am assured that money is no earthly use where I am going, everything is done by exchange for cloth and iron or something else. My two large boats I am compelled to leave behind as my present route lies over a hilly country, where I could not possibly take them. But, if I make out the Cunene satisfactorily, they may yet have to carry me. I shall be able to write one more letter, that you will get in a reasonable time and that will be when the vessel leaves me in Walfisch Bay. After then I will leave one or two with the Missionaries, and when I quit them, if all goes well I may soon get within messenger reach of the Portuguese settlements. I have of course to write to Sir H. Smith and I think I will do so to Lord Palmerston and to the Geographical Society, so that letter sending will be a great object to me and I will do all I can to contrive it successfully. Well, I have now done with myself. It is no good asking questions about home because I do not expect to *receive* a letter until I return. I have had none from England yet, your hunting season will be just beginning when you get this, I suppose. I am curious to know if you have been yachting this year. I think if you were suddenly transported here, you would like the place amazingly so many horses all with a deal of blood in them. Every cart goes at a trot and is driven 4, 6, or even 8, in hand. Sometimes you see a set of tearing horses and a young strip of a lad only, with an immense whip to manage them. I have only 4 dogs. Well the sheet is out, so goodbye. I often think of you all at Edstone and Claverdon and regret the Sunday evening rides. Give my love to my Mother and all, and send this letter as a circular to them. I will give you pictures in my next. When you write, address to me care of Messrs Van der Byl and Co., Cape Town, Cape of Good Hope. Goodbye old fellow.

FRANK GALTON.

WALFISCH BAY, SOUTH WEST OF AFRICA. 27th August, 1850.

DEAREST MOTHER, At last I am fairly on the desert with everything before me quite clear and apparently easy. I have, I find, made a most fortunate selection of men. They work most willingly and well, and nearly all know some kind of trade. When I arrived here some 3 days ago, the Missionaries came down to meet me, and have been most civil. I am sure I have selected a far better route than my first one, for now I am quite as near the undiscovered country as I should have been after 3 months land journey from Algoa Bay. Ostriches are all about round here, though I have seen none yet. We got 5 eggs and ate them the other day. Lions infest the country about 30 miles off; if they don't eat my mules I shall have delightful shooting. The ship unexpectedly is on the point of starting, so my dear Mother, a long intended letter is

spoilt. It appears the weather glass has unexpectedly fallen, and the vessel is obliged to be off some hours before her time. Many of my intended letters are therefore stopped, pray tell Douglas and Uncle Hubert I had intended writing to them, you will hear no more from me, for I fear a very long time. I explained the reason why in full to Darwin, in my letter to him. Goodbye then, give my affectionate love to all the family. I start into the country in 4 or 5 days.

Ever your affectionate son, FRANK GALTON.

Andersson is an excellent fellow and desires to be remembered to you.

Lat. 22.7, Long. 17. About Decr. 1850.

DEAREST MOTHER, This letter cannot I think be less than 6 months on the road, as it is pretty far by land from the Cape. In the first place we are all in excellent health, high spirits and thorough travelling order, though we have had an immense deal of trouble and some hardships. The weather too is warm, 157° (one hundred and fifty seven degrees) Fahrenheit in the sun at midday and from 90° to 100° in the coolest shade, under thick trees and that sort of shade about 110° to 115°. This appeared quite incredible to me, but I have compared 7 thermometers of 5 different makers and they all agree, so there can be no doubt about it. The air is not oppressive at all—we are at the furthest missionary station and not further, and now I will tell you all the story in order. The ship sailed away from Walfisch Bay which is 3 miles of heavy sand from fresh water; we were employed about 10 days in getting every thing thence to the water in the cart with the mules. When there we were 18 miles from a Missionary Station. It took nearly 3 weeks to get everything there. It is the only liveable place in that part, as the water at the first place was execrable, so bad that I had to distill every drop we drank. I kept a still going night and day and so we were supplied. After resting the mules we packed plenty of iron things, guns and so forth, making a very heavy load in the cart, to buy oxen with about 180 miles up country. I got 3 oxen here on the backs of which, some more things were packed and with a good sort of ruffian, originally a Tailor, subsequently a kind of Missionary, and now a ruined cattle dealer for a guide away we went. The men had all to walk. Andersson crossed 40 miles of desert in great style and made another 24 miles journey after, when the mules were sorely knocked up; we were obliged to let them and the horses feed at night in the river and seeing no tracks of lions about, we did so without much fear. What was our horror the next morning on going down—when we saw, not a mule or a horse, but their tracks going full gallop in a drove, and by their side, the tracks of six lions, full chase. A little further on, my pet mule lay dead, and a lion eating it; by the side a wolf waiting for his turn, again a little further my biggest horse just killed and nothing more to be seen. We ran up to where the cart and encampment was, 2 miles off at the top of the steep banks of the river; provisioned and armed 4 men for two days and sent them off after the mules, and the rest of us hunted the lions, but unsuccessfully all day. They had got among the rocks and we could not track them. In the evening we went down to get the flesh to eat, for all our live stock had perished and we were very hungry and then Andersson (who is the best fellow in the world) and myself went up well armed, to watch the carcass of the mules from a charming place in the rocks just over it, and which we agreed no lion could possibly climb and made sure of making a good

bag without any danger, however as we were busied about the flesh, it was getting dark, and we saw what we thought was a quantity of antelopes running about the rocks, however they came nearer, and as I was lifting up a shoulder of the mule, I heard a sudden exclamation from the men and there were these annoying vermin of lions, just above in the very place we were going to sit, it was very dark and they just put their heads over the stones, like big watch dogs. I thought it better not to fire in volley, but to keep guns in reserve, in case they came on us—so the Tailor fired first, but missed and the brutes were away. It was of course unsafe to watch where we had intended, especially as the night became very dark and so we went away, thoroughly vexed. I had polished off a lion in great style at the Missionary station of which I spoke; it was a one eyed brute that had done an infinity of mischief and had been hunted, I really am afraid to say how often. He came growling amongst the horses and frightening the oxen, three nights when I was there and ate up a nice little dog that I much wanted to buy. We started, the Missionary, the Tailor and myself with a great posse of natives who tracked him beautifully; when we found, he was about 80 yards off and bounding about, so that as I had but one barrel and was on horseback, I did not like then to venture my reputation on a shot, so we cantered after him, dogs and men full cry and after 3 hours got him nicely among the heavy sandhills, a loose lion is certainly a fine beast, so I cantered to about 40 yards behind him, pulled up and placed a two ounce ball very nicely in his stern. It was great fun to see him growl and lash his tail. Well on he went and turned into a bush in a towering passion. Here we dismounted and walked up the next sandhills, about 30 yards from him and the first bullet (from the Missionary) shot him stone dead, and the little dog was undigested in his inside, hardly at all chewed.—Well going back to my story we found the rest of the mules unhurt and we pushed on. Water was now to hand continually, and Andersson and myself alternately rode. We had great ill luck with game, seeing none. I had however a very pretty gallop after a giraffe and after wounding him, drove him to a tree in front of the cart and there shot him. I had only my little rifle with 32 bore but I fired conical bullets, steel pointed, and he dropped just like one of the oxen at Edstone on a Monday morning. This was a very welcome addition to our food, for we were very weak from hunger, it was near a native village and I exchanged the flesh for ostrich eggs, milk, sweet gum (to eat) &c. &c. and we stopped and gorged ourselves for two days. So we went on, and on the fifteenth day reached Rehoboth¹. The men were tired and partly mutinous, and the Namaquas (a sort of Hottentot) had driven every native away and all their cattle, and not one was to be got. Fortunately an American lived there, who had 50 oxen to sell. I took him into my service and bought his oxen at 25s. each—half of them being broken in. To break in the remainder was a dreadful labour, but now all 47 (3 being killed in the process) are excellent draught oxen—6 or 7 of them good riding oxen—and we think nothing of packing the wildest beast. The men have been tossed about a little, and I got a vicious poke made at me, when on horseback, but turned the horse

¹ In January, 1909, Professor H. H. W. Pearson met at Rehoboth an old woman, Mrs. Bassingthwaite, who remembered distinctly Galton visiting her father's house when she was a girl, seven years old. He was the "very intelligent Englishman, a blackmith," Dixon by name, mentioned in *Tropical South Africa*, 1st edn., p. 117. For a lifetime she had wondered what had become of him and why he never came back!

just in time to receive it only slantingly, so that the skin was not broken. All this breaking work my new man Hans, under Andersson's management did. Of the three men who were chiefly mutinous and who also were convicted of stealing, one went away, and Andersson flogged the two others most severely—and with the best effect—and now everybody works well and willingly. Waggon and all are brought here, and we shall soon start. The murdering and stealing of the Namaquas against the Damaras is horrible, they cut off the hands and feet to get the iron bracelets. About 25 thousand head of cattle have just been stolen. I have been diplomatising, in pursuance of my instructions, but with very little effect, and must now push my way between all these ruffians. The only fear I have is of the oxen being stolen at night, when we should have to walk, which is very severe work in this weather, but go I will, and we are strong enough to astonish a great number of the natives, if we blaze at them. My remaining horse and 3 mules have died of the horse distemper. I have now 5 mules and 51 Oxen. My cart I shall leave behind as it is hardly strong enough. Andersson went down to fetch the waggons with most of the men and shot a rhinoceros—but there is very little game, and now, as I have to hunt entirely on foot, I seldom go out, it is no joke in this weather. I have picked up a little of the Ovaherero language, which is spoken most extensively I find. I go northwards and shall thence probably get a letter to you, through the Portuguese. Every step now is exploring. The season is now unfortunately at its driest, but I think I shall get on. Ten days journey to the North, will put me beyond all desert and among kindly negroes who garden and plant. My black man speaks very fairly the language, it is so like to his own. Where I shall next be heard of, if not through the Portuguese, I can give you no idea. I have of course received no letter whatever from England, since I left it. This goes by a kind of clubbed up post, from Missionary Station to Station. The map I sent you, turns out to be simply traced from an English map made by a theorising map maker, which the Missionary had.—He adopted the outline, just to put in what he conceived to be the positions of the Stations and for no other purpose. It is therefore totally valueless. You know I write this letter to all the family. It is quite a round robin—and therefore I send no special message to anybody. Andersson desires particularly everything civil, &c., &c., it's a long message but I have no room for it.—Ever most affectionately, FRANK GALTON.

Lat. 22.7, Long. 17. Dec. 5, 1850.

MY DEAR CAMPBELL¹, We have been now three months among the savages and I find an opportunity of sending letters by clubbing together with some missionaries on the road. The letter will have a three months land journey to make to get to the Cape so that in England it will give rather antiquated intelligence. I like the work amazingly although we have had some real hardship. It is a curious feeling the being really weak from starvation, and I have had the pleasure of experiencing it more than once, but then it is such a luxury to get something to eat that all taken together leaves nothing to complain. Once six lions came down and ate part of my favourite horse and my nicest mule; we had to live on the rest for some time, the meat was tough but strengthening. Another time we were sadly off when to my delight I saw great tracks quite fresh, as broad as a plate, of a cameleopard and we encamped after we had shot him near his carcass and lived like wolves upon him. It is a barren country hereabouts. I must

¹ The Hon. W. F. Campbell, M.P., afterwards Lord Campbell.

try to get to the north and start in a fortnight; we have got no distance as yet as I had first to buy the oxen and then which is no joke to break them in. Fancy having two heavy wagons on the one hand and fifty wild oxen on the other that toss and kick and roll and are as vicious as young "thorobreds" it took time before we could make them pull kindly.

The plan is to drive the oxen together all in a heap, and then one man, who must understand the work takes a long cord with a loop at one end and this he holds twisted round a stick and two or three others hold the loose end, then he creeps up behind the ox that he wants and as the ox is shuffling about he slips the noose round his leg, and then such a confusion! The ox pulls frantically, runs at the men who have hold of the rope and they hold on all the same, at last they pull him down and catch tight hold (3 or 4 of them) of his tail and turn him on his back and then they tie all four legs together and leave him, so they treat as many as they want, then they yoke them as they lie and let them loose. My horses and most of my mules are dead so we hack oxen; my hunting saddle fits an ox's back excellently, but it is not a sporting beast to put it on. I don't like the horns, an ox is a difficult beast to have a firm seat on as their skin is so loose, they also kick and jump very short so that a rider's seat is severely tried; if you fall the horns are much in the way, especially as they usually butt at you as you fall, and kick afterwards. The country here is in the wildest disorder, murdering and cattle robbing are of every day occurrence; I picked up a poor wretch with his neck cut down behind to the backbone, and did what I could but he died. A set of lawless ruffians many of whose leaders were born in the Cape Colony do all this; they destroyed a missionary station 9 miles from here a few days since. I have been making all use I could of the instructions Sir Harry Smith gave me to stop this, but with no avail. Immediately after I wrote to these men (the Namaquas) they set out, attacked twenty-five different villages took very many of the women and children as slaves and all the cattle, which last can hardly be reckoned at less than 18 thousand in number. The scoundrels too cut off the hands and feet of any of them that they catch in order to get off the iron bracelets that they wear and which otherwise would take them 4 minutes to do. I have seen two wretched women who crawled here for refuge thus mutilated, they told me that they stopped the blood by poking the limb in the sand. All the natives here believe every white face to be their enemy, and very naturally too, I shall have to force my way through them in a fortnight as I best can. We should make a fair resistance to a very large body of natives and to a good-sized force of Namaquas; so that if they don't steal our cattle and leave us a wreck on the plain we shall do. 14 days journey North will carry us through all this and to a much better country bordering on the Portuguese where the blacks garden and have kings; here the chiefs have no power, there is no union among the people, but each does what he likes. You can kill any man you like (not a chief) if you pay 6 oxen to his heirs and poor men are much cheaper. Is it not horrible? My men I had much trouble with at first, they did not like hard work and a hot sun; they thieved and were almost mutinous. At last two cases occurred that called for strong measures, open theft and an attempt to stab, the men were flogged about as severely as they could be and with the very best effect. I think one and all of them would now go with me almost

anywhere. Andersson has uniformly been of the greatest assistance. If all goes right I think I shall be able to send a letter through the Portuguese settlements. Remember me to all my friends and believe me ever sincerely your FRANK GALTON.

Feb. 28th. After I had written the enclosed letter and sent it off I started but after going a short distance all my native servants were so alarmed on account of the fightings that were going on that they ran away. Besides that, there had not been rain sufficient for our journey insomuch that the letter carrier came back. So I determined to employ my time by riding straight down with my double barrelled rifle on the Namaqua captain and seeing whether I could not bring him to reason. I saddled my ox with the largest horns, and in my pink hunting coat and jack boots the identical ones that have more than once been in your company to Slough, I hacked over the three days journey that separated us and then going cautiously to the very edge of the little hill round the corner of which his place lay let my oxen get their wind and then together with the men I had with me, rammed my spurs into the beast's ribs and shoved him along right into the captain's house, at least as far as his horns would let him go. The captain was at rest, he was smoking his pipe. It was the cool of the evening. Fancy the effect. I made the man as submissive as a baby. I made him solemnly pledge his word before his people that he would leave off all oppression towards the Damaras. I had all the other Captains from a wide extent of country up to his place and made them promise to do the same. To the missionary whose station was destroyed I made them write a most submissive apology, and it is really a fact that I got these scoundrels to like me. They made me umpire in their own disputes. I laid down laws for them, simple concerns certainly but they had none before. And these are in force along 250 miles of frontier, and then having settled all to my satisfaction I told them to be careful as I should certainly return that way and then went back to my waggons. The Damaras are charmed, I shall have no difficulty now in travelling. I could almost worship my red coat and jack boots that have done all this. I had not conscience enough to put on that huge cocked hat of mine—no, I patronised my hunting cap. This is a very important land for future commerce from the large quantity of cattle and its neighbourhood to St Helena, which is the great store for homeward bound ships. I have of course sent all particulars to Cape Town and I really think that what I have done in the way of making peace will be followed up. Our waggon road is determined on ahead. I am now at the very furthest point Europeans have ever reached and tomorrow we start. I expect to come back here in about 6 months. There is a large lake "Omanbonde" about 10 days N.W. from here. I have myself seen hills that can descry it, and there I hope first to go.

Once again good bye and believe me ever yrs sincerely FRANK GALTON.

Galton's position was a very difficult one; he found the Namaquas headed by Hottentot chiefs—to whom indeed the British Government had given "captain's sticks," and who were British subjects—massacring Damaras and stealing their cattle. His sole official instructions, as sent to Jonker, "were to offer friendly relations on the part of the British Government to nations living in a certain specified tract of country in her

SKETCHES FROM GALTON'S AFRICAN DIARIES.



The Captain of the Hottentots walks off with the laws drawn up for him by Francis Galton.

36^s Jan 23 - 1851. —
 Ich erkende dat ik out verkeerd gedaen heeft in dat land, maar ik
 geeft mijn wort naar het Engels Government dat ik van deze
 dag af, zal ophouden oorlog te maaken tegen de Lamasas.
 Ik beloof dat ik out met al mijn becoft ~~alleen~~ breede ik hand
 met hem indat ik zal mijn vermoegen doen met de ander
 Kapityn te doen dersulde
 Witnessed by Francis Galton } at Con Jonbaalout
 Timotheus Sneewe }
 Translation of the above.

Facsimile of the original promise of Jonker Afrikaner to keep the peace in Damaraland. The promise is in Dutch and signed by the Chief, witnesses Francis Galton and Timotheus Sneewe.

neighbourhood, and within the probable reach of her future commerce, and which were understood to be in danger of oppression from certain British subjects and others who are in no way connected with your [Jonker's] people. Now this specified tract of country includes Damara-land and my instructions are of so general a character that although not framed with a view to oppose Namaqua oppression in particular, yet in so far as it is oppression, carried on in part by British subjects and in this part of South Africa it becomes my immediate duty to act upon them." [Letter to Captain Jonker Afrikaner from Barmen, Nov. 25, 1850.] Even while Galton was waiting for the answer to this letter to Jonker—which answer the latter sent 300 miles round—the Hottentots burnt eleven of the remaining 15 werfts of Kaitchené and eleven others belonging to other Damara chiefs, corresponding according to Galton's calculations to about 18,000 head of cattle raided. Galton could not possibly go forward through the middle of this ravaging, and with characteristic pluck, and probably disregarding entirely his very nebulous instructions, he determined to frighten Jonker into more orderly behaviour. His fairly stern letters had produced no effect. Such was the origin of the "red hunting-coat" expedition as described in the above letter. The end might have been very different, but Galton faced the danger, got abject apologies to the missionary Kolbe and to the British Government signed, and laws proclaimed by the Hottentot chiefs to rule their relations to the Damaras. We reproduce Captain Jonker Afrikaner's promise to the British Government: see Plate LVIII. Translated freely by Galton it runs:

I acknowledge that I have done much wrong in this land, but I pledge my word to the English government that from this day forward I will abstain from all injustice to the Damaras. I promise that I will with all my power keep peace with them and that I will use my influence as well as I can to persuade the other Captains to do the same.

[Signed] I am, JONKER AFFRIKANER.

Witnesses to this signature:

FRANCIS GALTON.

TIMOTHEUS SNEEWE.

Interesting are the notes Galton, then aged 29, wrote for the speech he made as first lawgiver to this lawless crew. They run as follows:

Speak about the signatures, strength of England, could furnish every Damara with a gun, could cut off trade to south.

(1)¹ What is "justice," explained by these laws. 15 laws cannot meet every case, but they will lay down a base on which very many cases may be treated. If

¹ The numbers refer to the remarks on the special laws which follow this.

J. acts well on the whole, it will be known, if ill, also. No enquiries need be made into special cases. It is the office of a Captain to take the labour and anxiety of judging on himself. A man who does not do so is not fit to be a chief.

(3) Better ten guilty escape than one innocent suffer.

(4) Against the practice of retaliation (indiscriminate).

(5) Speak very strongly about this—it shows the Namaquas are cowards—say they are drunkards too.

(6) Very much punishment must be left to the discretion of the judge; this explains the principles on which it is regulated. Crime is never checked by severe and uncertain punishment. If too severe it raises sympathy on behalf of the criminal and the laws are hated.

(7) Speak much on the advantages of certainty and quickness of punishment towards checking crime.

(8) J.'s simple justice. J. must not keep the [stolen] cattle for himself, but return the stolen—and half the "Regt's Beesten"¹ to the Damara.

(9) I conceive that in the long run the "Regt's Beesten" will defray the costs of justice. A sufficient number of the stolen cattle must of course be found to warrant acting under this law.

(11) To receive oxen in compensation for punishment would be in most cases simple bribery in order that oxen might be stolen. J. might be glad to have a watcher killed that he might demand oxen.

(12) Great honesty must be shewn in regard to the "Pand Ossen" and simple suspicion must never warrant their being taken. Culprit must be brought to Jonker's place to ensure a cool enquiry into the case and proven identity.

N.B. For frequently repeated thefts stronger measures must of course be taken.

(15) Allude again to No. 11. Police Badge.

Here follows Galton's code² put into the mouth of Jonker and read out in Dutch to the assembly :

(1) I have pledged my word to the English Government that I will act henceforth according to law towards the Damaras.

(2) Now I give these laws for myself and for my people.

(3) I will not treat the innocent as I treat the guilty.

(4) I will not fire off an innocent werft to make amends for stolen cattle.

(5) I will not allow that women and children have their hands and feet cut off and suchlike mishandlings.

(6) I will not punish a thief with death, and I will not give heavy punishments for small offences.

(7) But I shall do my best that no offence against me or my people shall remain unpunished.

(8) I will also punish my own folk, who do injury to the Damaras, with the same penalty and law as I punish the Damaras with, who do injury to me or my people.

¹ *I.e.* the judicial fine measured in oxen.

² The Dutch version is in the folio volume; a much overwritten and rewritten English original in one of the pocket-books in Galton's hand.

(9) But when beasts or cattle are stolen from me or my people, I will take two-fold as many from the thief, or from those who have aided the thief, *when it is proven*. That is to say, I will take again the beasts which have been stolen, or when I cannot find all, so many as the number is. And I will also take the same number as "Regt's Beesten" (that is to say, cattle taken to pay for the trouble and costs).

(10) Also I will punish the thief with forty lashes.

(11) When one of my watchers on the feldt has been murdered, and my cattle stolen, then shall the murderer be brought to my place and put to death. I will take no payment from the murderer in any form whatever.

(12) From him who hides a thief, I will take 10 oxen as pledge oxen (Pand Ossen), and retain them until the thief is brought out to me. I will take 20 pledge oxen from those who hide a murderer. I will give these back when the evil doer is brought to me.

(13) If the thieves drive my cattle away to a werft, and the werft will not give the thieves up when my men go there and ask for them, then I will not fire that werft, neither will I take all their oxen, but I will take back the beasts that are stolen, and from their beasts will drive out "Regt's Beesten" for the werft is guilty, and besides these I will take the pledge oxen. I will not take more.

(14) Furthermore if the men of the werft have fled when they see my men coming and have left their cattle loose on the feldt, then I will not take all beasts that they have, but I will take the stolen cattle out from among the others, and then over and above the "Regt's Beesten" and the pledge cattle. I will take no more.

(15) The half of the "Regt's Beesten," shall go to him from whom the cattle have been stolen. The other half goes to me. The pledge oxen I take in charge.

A primitive law code it must be admitted! But this Galton-justice ruled for many months on the borderland of the Namaquas and Damaras, and half-a-dozen honest Englishmen with fifty Cape mounted police could have maintained order and developed trade for many years in that district after Galton's visit. As it was the British Government idled and faltered, until Germany stepped in to reap where Galton had sown.

Imagination dwells pleasantly on the youthful law-giver fresh from his fallow years of shooting and hunting facing this population of "O'erlams"—a mixture of Boer and Hottentot blood—the greater part of whom according to him had the common "felon face." A note made on Jan. 24, 1851, in one of the pocket books is, however, worth reproducing:

"Jonker is decidedly a talented man and seems in full vigour, his shrewd remarks, concise descriptions and keen observation shows him to be no ordinary man. He came out quite as a diplomatist in the long conversation I had with him about the interior, artfully contriving to turn the conversation to his own ends."

Galton's influence not only over Jonker, but over Cornelius, Swartboy and Amiral, was marked, and it is characteristic of the man that but little of it is manifested in his published book. The whole episode of his attempt to establish order in Namaqua and Damara-lands must be studied in the MS. notebooks.

The following is the bare account which reached the press of that day of Galton's proceedings.

CAPE NEWSPAPER. *22nd August, 1851. Mr Galton's Expedition.*

Letters have been received from the enterprising traveller Mr Galton who our readers will remember started for the Great Lake via Walfisch Bay in September last. Mr Galton writes, under date the 1st March from Lat. 22° South, Long. 10° 49' East. Mr Galton arrived in the Damara Country in October, he reports constant fighting and wars of reprisals between the Damaras and the Namaquas, which commenced 4 years ago but had lately increased in ferocity and extent; Jonker Afrikaner being a principal mover. The destruction of the village of Damaras, gathered around Mr Kolbe's mission station reported in the papers at the time, and the purchase of plundered cattle by white men, had led to difficulties in the way of Mr Galton's progress, and to the prospects of commerce. Mr Galton, on his arrival in that country wrote to Jonker Afrikaner, acquainting him with the instruction he had received from the Governor to establish friendly relations with the native tribes on the route to Lake Ngami, with a view to prepare a way for future commerce and to warn them against any attempts to dispossess them of their country; and intimating the displeasure of the British Governor at the oppression of the other tribes by the Namaquas. Jonker's answer was delayed a month and was unsatisfactory, and Mr Galton then rode straight to him with an escort of only three followers, and succeeded in thoroughly alarming him. He made Jonker write a most ample acknowledgment of his wrong to Mr Kolbe; and advised him also to make the same acknowledgment to the British Governor, which he did, and sent it by a messenger forthwith to the colony. Mr Galton also made Jonker send for a neighbouring captain of the red people, and made him also solemnly undertake to leave off oppressing the Damaras, and wrote out a few simple laws to meet cases of cattle stealing, which were cordially agreed to. One of these laws provided for the equal punishment of Namaquas with that of Damaras for stealing. Some of their own disputes were also voluntarily referred to Mr Galton as umpire. Mr Galton has received much valuable and interesting information respecting the transactions in that part of the country for some years past, from the diary of Mr Hahn, the longest resident missionary among the Damaras. Mr Galton, at the date of his letters, was to start for the interior in two days, but intimates his intention of returning that way in about six months. A considerable impression has been made on the native minds by Mr Galton's visit, and a way appears to be prepared for the progress of European commerce and civilisation in that direction at no very distant period: but very much will depend on the conduct of those here, who hereafter attempt to open out further relations with the natives.

We shall endeavour to procure for our readers if possible, further details of these most interesting communications.

We may now return to the home letters.

Feby. 22nd [1851]. Lat. 22, Long. 18° 50'.

DEAREST MOTHER,

.....We are all well provisioned here, I have about 85 oxen and 30 small cattle. Still, eating nothing but meat, and having so many mouths to feed, an ox hardly lasts 3 days. I allow 4 lbs. of meat to each man. I have quite lost all care for vegetables, and I have only drank wine (or rather brandy) once since landing at Walfisch Bay. We have had admirable health and now although the sun is high yet the rainy season has brought its clouds and the climate is really very pleasant. I am becoming a stunning shot with my rifle, and always shoot plenty of ducks, partridges and guinea fowl with it. Andersson is quite invaluable, and I have a very good set of servants now, some I picked up in the country. Three I turned away—one of these committed some barefaced robberies, but the natives were afraid to take him prisoner. I happened to be at Rehoboth shortly after he left it, where I heard of what he had done, and I rode very hard to the Southward for a night and day—changing oxen after him, but a stern chase is a long one, and he had too much start, so that I could not catch him.—Oxen are certainly cheap among the Damaras—you recollect my guns that I gave 9s. 3d. each for—well I get 5 large oxen for each gun—I heartily wish I had more.—I do not think that I shall be more than 6 months from here, as I must keep my eye on the Namaquas. If fortune favours me, I shall be able, I have no doubt, to make an entirely open road for future commerce here—where people may travel and trade without any danger. I have taken great pains about mapping the country.—It is a great amusement, and the Government at the Cape, expressed so much anxiety about creating a cattle commerce here, that I have no doubt that what I have done will be soon followed up. We have found that there really is a lake, corresponding to what was placed down as Demboa, in the map you had from me—its name is Omabonde—there I am first going. I have several blacks in my service who have been there. The Ovampo Blacks live close by. They are a good set of people, everybody speaks well of them. For interpreters I am right well off and on the whole, all looks very favourable. I fear my letter is very dull—when I can write again I do not know, but do not expect to hear from me at any fixed time.—There are so many difficulties in sending letters that it is impossible to be punctual but in 6 months I dare say you will get one. Give my best love to each and all of the Family and believe me ever, Your affectionate son,

FRANK GALTON.

Lat. 22, Long. 16° 50'. *Feby. 23rd*, 1851.

DEAR DARWIN,

.....We had such a chivy after a hyena two nights ago, the dogs found him just as we had all turned in to sleep. I jumped up, had only time to put my shoes on and dressed in them, my shirt and my gun and nothing else, had a scamper up and down, through thorns and over hills for ever such a way. I could have speared him two or three times, but could not shoot for the darkness and the dogs.—At last he stood at bay in an open place where I shot him through the back bone. Talking of back bones, as I have just left the land of the Hottentots, I am sure that you will be curious to learn whether the Hottentot Ladies are really endowed with that shape which European

milliners so vainly attempt to imitate. They *are* so, it is a fact, Darwin. I have seen figures that would drive the females of our native land desperate—figures that could afford to scoff at Crinoline, nay more, as a scientific man and as a lover of the beautiful I have dexterously even without the knowledge of the parties concerned, resorted to actual measurement. Had I been a proficient in the language, I should have advanced, and bowed and smiled like Goldney, I should have explained the dress of the ladies of our country, I should have said that the earth was ransacked for iron to afford steel springs, that the seas were fished with consummate daring to obtain whalebone, that far distant lands were overrun to possess ourselves of caoutchouc—that these three products were ingeniously wrought by competing artists, to the utmost perfection, that their handiwork was displayed in every street corner and advertised in every periodical but that on the other hand, that great as is European skill, yet it was nothing before the handiwork of a bounteous nature. Here I should have blushed bowed and smiled again, handed the tape and requested them to make themselves the necessary measurement as I stood by and registered the inches or rather yards. This however I could not do—there were none but Missionaries near to interpret for me, they would never have entered into my feelings and therefore to them I did not apply—but I sat at a distance with my sextant, and as the ladies turned themselves about, as women always do, to be admired, I surveyed them in every way and subsequently measured the distance of the spot where they stood—worked out and tabulated the results at my leisure. I have been measuring other things all the time I have been here, for I have been working hard to make a good map of the country and am quite pleased with my success. I can now calculate upon getting the latitude of any place, on a clear night to three hundred yards. I have fortunately got very good instruments and have made simple stands to mount them upon, so that I can in a few minutes set up quite a little observatory. My little tent has been of great use in making excursions with ride and pack oxen. It is perfectly waterproof and is still as good as new. My establishment now consists of 9 white or whitish people, including myself and two blacks but they are men who have lived with Whites all their lives and about 10 natives—86 Oxen and 30 small cattle, and some 6 or 7 dogs; together with two waggons. We start onwards the day after tomorrow. Now we are at the furthest point Whites have ever reached and we steer about N.W. to a lake we have heard of about 200 miles off. I shall then make a short tour and return here to keep the Namaquas in order. I want to explore this country thoroughly. It is a very important one for future commerce, and I should prefer exploring it well, rather than quickly going over a long line of country. I have learnt a great deal about the place and people and all that, but it is a long story about which you could feel little interest and therefore I spare you the history. We live on nothing but meat and coffee—and it suits us all admirably, there is quite enough to do to keep us from being dull—though I certainly should like to be dropped for a week in civilized society and then be taken back again.....I of course have heard nothing from Home since I left it.—Give my best love to everybody and believe me Ever affectly. yrs. FRANK GALTON.

If I get smashed I have told Andersson he may take all my things in Africa, and also that the wages of the men, which are £17. 15. 0. a month shall be continued for three months beyond the time that is reasonably necessary for the expedition to reach Cape Town. I have given him and also sent my Bankers a paper about it.

August 25. "SOUTH AFRICA."

(The lake I had heard about I went to; it proved to be a mere nothing, Omanbonde is the name of it¹. I did not try to get to Lake Ngami.)

MY DEAR CAMPBELL. I have just returned to the most advanced missionary stations after my exploring journey, which indeed led me through a country most desolate, thorny and uninteresting. But the end of it quite repaid my trouble, for I came to a peculiarly well civilised (if I may use such a word) nation of blacks where I was received most kindly but beyond whose territory I was not permitted to pass. I had arrived within 4 days of a vast river, the wonder of these parts, and to which the Portuguese traders reach, but it was impossible for me to go on. My waggons were broken and left behind with half my party to guard them amongst a large tribe of savages. My slaughter cattle were almost all consumed, and there was not nearly game enough to support us. I had ridden forward the last 200 miles on oxen, and these were knocked up and quite unable to stand more travel, so that I was in quite an unfit condition to force my way further. It was therefore with no ordinary reluctance that, like so many other African travellers, I was, when at my most interesting point, obliged to turn back. Still I consider that I have completed the road from the Portuguese boundaries to the Cape, for the small intervening tract of land which I have not seen is well inhabited and well watered. My furthest point was Lat. 17° 58', Long. 17° 45'. The nation I reached was the Ovampos, governed by a fat stern king. I crowned him with all solemnity. His country is most fertile, broad plains, half corn, half pasturage. Abundance of palms and other fruit-trees of magnificent size; they have poultry and pigs and live right well. I did not see a single person among them who shewed the least appearance of poverty. They have more than one sort of corn; that which they prize the most is, I believe, unknown in Europe; it is certainly unknown in the North and the East of Africa. I have of course brought plenty of it with me. Their fowls too are nice like Bantams, so I put a cock and two hens in a basket and made a man carry it all the way back; they thrive very well and are always laying eggs, which I am distributing among the missionaries so as to ensure extending the breed. I cannot say that we have had any real hardship, though the annoyances have been very great. We were mistrusted from the first as spies and could get no guides; the road was horrible for waggons, dense thorns curved like fish hooks cruelly tore our clothes and hands, the oxen dare not face them. However I got them on 300 miles, and then the best waggon broke down. It was mended on my return from Ovampo-land and we got back safely. I have learnt a great deal about the interior of Africa which will much interest those who care about such things. Now I have my hands full of Namaqua Hottentots. I told you how I had been setting the affairs to right in these parts before I left, and all have continued in admirable order up to my return. One tribe had however just broken out, so as soon as I came to the first Namaqua chief and heard all about it I rode straight away 100 miles in a day and a half to the next chief (where I am now) and tomorrow I take him back with me and the two chiefs are to ally together and compel the rebel one to restore all that he has just robbed with much loss of life. The barbarities that occur daily in these parts are most horrible and disgusting. It was quite a relief getting beyond them to the Ovampos. If all turns out well I go in

¹ See remark, ftn. p. 216.

a few days about 300 miles to the East for a little Elephant shooting. I can get horses now, and after all my trouble I want a little amusement, and I expect to gain some information that I want in that direction. A ship comes to Walfisch Bay in January and by it I shall go if all is right to St Helena on my road home. I cannot express the interest I feel to hear about England. No post has come here since I arrived but the ship is to bring everything. We have been most fortunate as regards health none of us have ever as yet suffered from illness, and everybody did his duty with the greatest good humour. For myself I feel in better health than I ever did in England. I hope that your occupations have not induced you to abandon the noble sport of fox hunting. I have now tried many sorts of hunting but I cand[idly assert] that fox hunting will bear comparison with any. T[here may be] greater excitement (but not much) in going after a large and vicious be[ast, but] the excellent horses of England, the music of the hou[nds and the nice] society are wanting in this country. I don't know that I have had any particularly hair breadth escapes; perhaps the one that was most so was in running up a hill I was quite blown and jumped up on a ledge of rock, when I had a little lost my balance. It happened that I had leapt on a large serpent's tail, one said to be of the most venomous kind, a black creature 7 feet long. He was up in an instant as high as my face in a fearful wrath, and drew back his head to dart at me; but I had recovered my balance, and did not wait for him, for I leapt clean down the steep rock near. He came down too, but when I at last found a stick he was going best pace among the bushes, and though I had a long chivy after the rascal, I could not kill him. Pray remember me to Lady Stratheden, and to your party and believe me ever sincerely yours, FRANK GALTON. I regret much that I could get only a bag of the new corn for the Harmonicon that I was entrusted with.

EIKHAMS, NAMAQUA LAND, S. AFRICA. *Augt. 16th, 1851.*

DEAREST MOTHER, I have a long story to tell, so long that I think it will tire you to read it, all about captains and chiefs and all that sort of thing, which interests people in these parts, but about which you cannot be expected to care. I have returned after a journey not so long as I had hoped to have made, but still extensive enough to save my credit as a traveller. Of bran new country I have explored about 500 miles out and then went back again by much the same route. The Portuguese and the magnificent intervening river, of which the Cunene is but a branch, I did not quite reach. Those abominable waggons have been like a drag chain upon me. All has ended well and we have had no sickness whatever. Andersson is a right good fellow and I have had plenty of occupation in mapping the country, so that altogether the time has passed pleasantly. Of game there is next to nothing, my guns have been quite idle.—After leaving the farthest Missionary Station, I got just between the two principal Black chiefs, who were on the point of fighting. I managed to get myself and party clear of the massacre, and without guides had the good luck to find a sufficient quantity of water from place to place for ourselves and oxen, so that we had no hardship that way. The country was a dense mass of thorns, not simple straight thorns like a quickset of hedge, but curved like fish hooks, the oxen would not face them, it was terrible work getting them on. I often tried the strength of these thorns by fastening a bit of rag to a spring balance and pulling till the thorn broke—one thorn stood a pull of 27 lbs.—just conceive. Our

clothes were in rags and at first our skins were very painful, from being torn about so much, especially as the scratches generally festered, but we got hard in time. Well I found my way to the reported lake Omanbonde, which was as dry as dust, not a drop of water in the reeds, quite a sell. From the natives' description we had reckoned on a sheet of water about 30 miles by 8. It was just a bit of a water course 300 yards broad and might be in the rainy season 2 miles long—Lake Ngami I have not tried for. Well I went on to the North. We moved very slowly—the waggons had to crush through everything, and the oxen would not pull through the thorns. After 300 miles altogether I got to the end of the country of the Ovahereros and to a large village. Hence I tried to get guides to the Ovampo, the chief would not give them, so I set off again, for we would not be beaten. Just at starting the oxen were frightened and set off on a trot, there was a rotten looking stump in front, but really a hard strong tree—the near fore wheel of my best waggon came against it and crash went the whole concern. There was a fix; we set to work, brought the other waggon alongside—made a hedge of thorns, cleared the ground and at once a party went off, to cut down trees to mend it. The road had been so stony and execrable in every way, that it would be folly to venture with an axletree of green wood, and so the waggons must stay some weeks there, while the trees seasoned a little. I halved my party, and Andersson and myself saddled our oxen and went to the North. We got a man who said he could take us the 15 days' journey on to the Ovampo, he led us all wrong, and we were hard put to it for water. All sorts of little disasters occurred, we made three pushes to try and get on; the third time most fortunately we met an Ovampo trading party, who had come down to buy cattle, so we went back with them, waited 3 long weeks till they were ready to return and then went to their country with them. After 200 miles, the bushes and thorns suddenly ceased, and the charming corn country of Ondonga, with its palms and fruit trees, was before us. I rode to the King and crowned him straightway with that great theatrical crown I had. He was a brute, fat as a tub, but his people were most hospitable. The journey had been longer than I thought, my oxen were in a sad state, footsore and galled backs. I had to buy and carry back provisions, for we had but little cattle left. The Cunene river was 4 or 5 days a head, but Nangoro (the King) would not let us go; had I been able to stay 3 or 4 weeks, I might have persuaded him or frightened him, for he had a strong dislike to gunpowder, but it was impossible. My waggons and the men with them, were in a precarious situation. I could not wait, so I packed 500 lbs. of corn flour, beans and so forth, on my oxen's backs and returned. All was right—the waggon well mended, axletree better than before, and about 60 more sheep and a few oxen, had been bought while I was away. We got back without accident of any sort by a slightly different road, and I am now at the Namaqua chief's place. I told you in my last letter how I made peace over the country, and it has been admirably kept during my absence. I have therefore given Jonker, the chief, a cocked hat, and an old Ambassador's coat of M. Sampayo's—that he gave me when in London. He is highly delighted. I go now to the East to get a little elephant shooting and shall swop everything I have for ivory, of which the Namaquas there have plenty, take it down to Walfisch Bay and start by the missionary ship for the Cape or for St Helena, either in December or January. If however there offer a good opportunity of going far, I may stop in the country. A trading party of

Blacks, from the Portuguese country, were at Mondonga, when I was there, but I could not send letters by them. The people are very superstitious and would have nothing to do with written things. I have of course heard nothing from home since I left England. I need not say with what anxiety I look forward to the arrival of the missionary ship which will bring my post from Cape Town. I have of course picked up much about the country, which will be of great interest to the people, who care about these things. A posse of missionaries are going to follow my road. The Ovampo are a charming set of niggers, but almost all the other nations I have heard of, are brutal and barbarous to an almost incredible degree. The Ovahereros, a very extended nation, attacked a village the other day for fun, and after killing all the men and women, they tied the children's legs together by the ankles, and strung them head downwards on a long pole, which they set horizontally between two trees; then they got plenty of reeds together and put them underneath and lighted them; and as the children were dying, poor wretches, half burnt, half suffocated, they danced and sung round them, and made a fine joke of it. Andersson desires to be particularly remembered to all. With my best love to all the family, relations and friends collectively and individually. Ever affectly. yours,

FRANK GALTON.

Ondonga is Lat. $17^{\circ} 57'$, Long. $16^{\circ} 44'$ (my farthest point).

The waggons broke down Lat. $19^{\circ} 30'$, Long. $18^{\circ} 20'$ —the furthest part seen by Europeans before is Lat. 22° , Long. $15^{\circ} 50'$. Ondonga is the corn country of Ovampo land; the lat. and long. given above, are of Nangoro's place, the capital.

P.S. On further consideration I shall be almost sure to sail for St Helena in December or January.

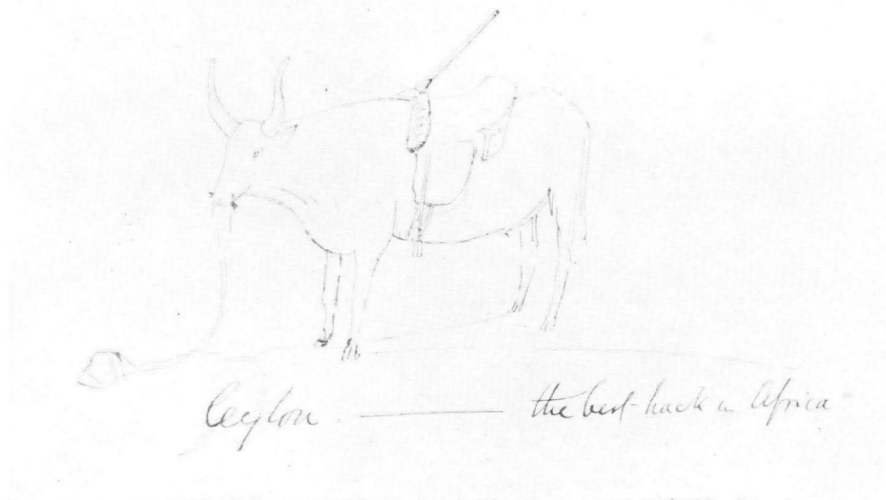
WALFISCH BAY. *8th Decr.*, 1851. *Recd. 27th March*, 1852.

DEAREST MOTHER, I have just returned from my travels to the Sea Coast, and have now to wait there until the vessel comes to fetch me and bring my letters, &c. This note I send by a ship now in the Bay and I wish much that I could go with her but I have to look after my men and I had ordered all my money to be transferred from the Cape to St Helena, but whether the letter has been received or not I cannot tell—so I must wait here a little longer, it may be a day, or it may be two months. I have made a pleasant journey this time and pushed on very far and to my satisfaction reached the tracks of people who had gone on to the great Lake. This year has been unusually dry, the driest that is known and so all along we have had great difficulty with water. Now as I went this time it was six months since any rain whatever had fallen, the cattle were dying of thirst, even at the regular watering places, so that you can fancy it was not easy to get on in travelling. However I came very well to the furthest point that the Hottentots hereabouts had ever reached to the Eastward, and there I heard a great many stories about the great waters a little further on (some ten days) from the Bushmen. There was a broad plain 63 miles across, with no water now, which made the next stage; so I got Bushmen guides and started. These distances which are nothing to a camel take a great deal out of an already tired ox; I had only 7 ride and pack oxen with me, two of them died on the road and a third was crippled he is since dead. However we got there all right and magnificent shooting there was. All the Bushmen and beasts of the country were collected there and any number almost of the

SKETCHES FROM GALTON'S AFRICAN DIARIES.



Nangoro, King of the Ovampo, original sketch, June 7, 1851, of his Majesty crowned with the theatrical tinsel crown purchased in Drury Lane. Cf. Plate XXXVIII.



Galton's favourite hack in Damaraland.

latter could have been killed. We got tired of shooting and after bagging thirty rhinoceroses in a week, left them alone. The Bushmen were in ecstasies, they dried every bit of the meat and wasted none. There were herds of elephants there but what could be done! The country was perfectly open and without horses it would have been madness to have gone after them. They look immense beasts in the night time. We sat up in the night in little places built round with loose stones. The walls about 3 feet high, and a circle of some six feet across, close by the water and there waited for the rhinoceroses. Many were shot 8 paces off—most about twelve. They very seldom drop on the spot, but as soon as wounded run about most viciously—one found out Andersson and knocked down his screen however he jumped out on the other side. They are extremely quick beasts—the largest shot was 16 feet long and about 6 feet high. I forget his girth, but it was enormous. I put a bullet clean through one, in at one side, and out at the other. It is very seldom that this happens, as the hide is so thick. Well at this place we came on the tracks of people who had reached the Lake on ride oxen, and great scoundrels they were too. The story is a long one, it is this. The year after Mr Oswell discovered the Lake, some Griquas explored a direct road to it, from the Southward and just after they had gone a party of the Kubabees (also from the South but more to the West than the Griquas) also went up the country on a plundering excursion. They reached 'Tounobis the place where we shot the rhinoceroses, and there hearing of the Griquas, they got Bushmen guides and reached their waggon tracks in four days, three days more brought them in sight of the Lake, and to the borders of a river that runs out of it to the eastward; there they attacked a small village. The Natives (the Mationa) all had their throats cut and the cattle were driven off. Another very large village was near, so the Kubabees dared not fire, for fear of being heard, so they only cut the throats of the people in the small village, and then went quickly back. They got, I hear, some very pretty carosses and all the Bushmen assure me that the unicorn is found here. I really begin to believe in the existence of the beast, as reports of the animal have been received in many parts of Africa, frequently in the North. Anyhow the skins which were stolen were quite new to all those who saw them. The guide of the Kubabees was one of my many informants. Last rainy season another party of 4 waggons and plenty of horses went to the Lake to shoot elephant. I do not know whether they have been murdered there, or returned some other way but nothing more has been heard of them. I could not find out, whether they were Griquas or Europeans—one of the Bushmen had got one of their iron cooking pots, a broken one.—I would have pushed on with my 4 remaining Oxen that were in travelling condition, but the next stage which intervined, between where I was, and the Mationa, was said to be a still longer one than that which I had just come. It was risking too much. My time was very limited, and as it is, after my return to my waggons, I have come down at such a pace that my remaining oxen are quite unfit for the shortest journey (I was so afraid of missing the ship that I expected). The rainy season will now soon come on and in April there will be water everywhere. My remaining things I have divided in two parts, with one I have paid £100 of wages &c. to Hans (my head man) who wants to stay in the country, the other half I have given to Andersson, who has entered into partnership with Hans, to trade in cattle and ivory. Andersson has been a right good fellow and has gone through very hard work. I have

thus fairly made out a road perfectly practicable in the rainy season from Walfisch Bay to the Lake, and what is more I have thoroughly identified the river that runs to the North of the Ovampo with one that runs *out* of the west corner of the Lake, and which very likely will before long, prove a highway to the interior.—Andersson will go to the Lake next April. A posse of missionaries will go to the North about the same time, so that discovery hereabouts will still be going on. This coast is the only one by which a practicable communication with the interior can be made—and I expect that before long it will prove of much importance. I have got a little ivory, about 300 lbs. weight. It will depend a good deal on the letters I receive, whether I go straight home hence or not. But I have had almost enough of knocking about, and should much like a little civilized life and a bed to sleep in. We have all had excellent health. It is now nearly two years since I have heard anything of any description whatever from home, so that I am getting very anxious for my letters. I wonder if you have received any of mine. I wrote in Feby. and in Augst. 1851. St Helena is now my first point, it may be even 3 months before I am there, though I hope it will be much sooner. I will write my next letter from thence. Goodbye now, with my best love or regards to every relation, connection or friend. Believe me ever Yr. Affectionate son, F. GALTON.

EMMA SCHOONER, EN ROUTE TO ST HELENA. *Janry. 8th, 1852.*

DEAREST MOTHER, Thank Heavens I am safe away from the Savages, in better health and all that, than I think I have ever been. We are just half way from Africa to St Helena where I trust that we shall arrive in less than 5 days. I write this to be posted as soon as I land there, though I myself shall stop a little to get what information I can upon some points that interest me a great deal from the niggers. I was most delighted when this vessel hove in sight at Walfisch Bay where I had been stopping for a month waiting here, and considerably in doubt whether or no, she would have brought me my letters &c. from Cape Town. All however turned out right, and a fine packet of letters and newspapers made their appearance, being the first news of any description that I had received from home since leaving Plymouth Dockyard, and most thankful was I, that all of you at home were in the same good health as when I left you. Many happy new years to you all. Poor Hallam¹! I feel as much grieved at his death as if I had lost a near relation, it makes a sad blank among my oldest friends. Walfisch Bay usually quite deserted, has been thrown into the greatest excitement by no less than 5 Vessels—3 of which were Whalers and one a man of War brig, coming in whilst I was there. I was in a nicely ragged state to pay my respects on board the Brig, but was most hospitably received. It was the "Grecian," Captn. Keane, who knew all the Howards and who was most civil. There had been a rumour that gunpowder was intended to be taken overland to the Kaffirs from there and she came down to reconnoitre I of course was able to give all information as to how it could be stopped, &c., if any arrived, and sent letters to the Native Chiefs telling them to stop the waggons if any came &c. I have brought these gentlemen into a considerable fear of me, Heaven knows how, but principally by bullying them. They made me their umpire in all weighty questions and do anything for me. Only think of the Chief one amongst

¹ Galton's friend Henry Hallam had died.

them, an old man, riding a long ten days' journey right across an abominable country, just to wish me goodbye before I left. Andersson I have left behind as trader, and set him up with my remaining provisions &c., on condition that he makes a good try, straightaway to reach the Lake, in this he will have I believe but little difficulty, as we have already so fully explored the more difficult parts of the roads there. The Missionaries go in a posse with 20 guns in another direction due north to the great river, at my request, and now I am trying to find out where this river most nearly joins the sea, and if I can arrange affairs so as to get a cruiser to take me there, which I do not think improbable, I will make a fortnight excursion to it and then return home. I have an excellent interpreter in my man Timboo and now knowing all the tribes adjacent to the river, I shall have I think very little difficulty in getting the necessary information at St Helena. To the Governor there I have a Government letter so I daresay that he will stretch a point to help me in my scheme. I have traced a water communication from a great lake if not *the* lake to the westward and so if I can only find out its mouth, a great step will be gained towards opening a road to the interior. But you will be tired of hearing about these things, which though they are my hobby, cannot be expected to be yours.—So Douglas and Herman have both gone and got married; if it was not so late, I would have written to them to have offered my best congratulations.—The missionaries here have a very funny way of getting married; when one wants a wife, he writes to the President of the Society who turns the matter over in his mind and picks out a likely young lady to suit him and packs her off. The most extraordinary thing is, that the young ladies are quite willing to go, whether they have ever seen their future spouse or not. A wife came out by this vessel for one of them. A middy on board the "Grecian" told me that he had lately met a German missionary at Sierra Leone who had had no less than thirteen wives. The climate killing the poor creatures as fast as they came out. This Bluebeard was just married to his fourteenth. I shall be very glad of a fortnight's rest at St Helena. Potatoes and bread I have been worrying at ever since I have been on board. They taste so nice after living for such a very long time on tough meat and hides, and a house with a roof to it and glass windows will be a real luxury, right glad too I shall be to get on the back of a horse, after plodding more than a hundred days' journeyings on that of an execrable ox. My saddle tree and stirrups I shall keep and use them in England. I shall of course write to you again from St Helena and so now, Goodbye and with my best love to every individual of the family, Believe me, Ever your affectionate son, F. GALTON.

Galton reached England on April 5, 1852, two years after his departure on the same day of the same month by the "Dalhousie." A sketch map of his route from Walfisch Bay to the interior had reached the Royal Geographical Society two months earlier. The paper describing his journey was read on Feb. 23 and on April 26, 1852, *i.e.* partly before and partly after his return. The preface to his *Tropical South Africa* is dated April 27, 1853—a year later. During that year he was awarded a gold medal of the Royal Geographical Society, followed in 1854 by the silver medal of the French Geographical

Society. Of the chief friends and acquaintances of Galton on this tour, Andersson ultimately followed the Galton northern route to the Cunene, the border river of the Portuguese possessions, and the Galton eastern route by Tounobis to Lake Ngami. Later he undertook commercial expeditions and tried a mining settlement in Damaraland; he had a stormy time with the Namaquas and an adventurous life, and ultimately died not far from Nangoro's capital. Nangoro's people came in 1858 into a controversy leading to much bloodshed with an expedition of the missionary Hahn, and Nangoro himself died some say foully or some say in fair fight at the same time. Galton himself expressed much regret at this attack on Nangoro's folk. The disastrous expedition of the missionary Hahn led incidently to the discovery of a lake said to be 25 to 30 miles long, by name Onondova, in lat. 21° and long. 19°; this is probably the origin of the mysterious Demboa Sea for which Galton vainly sought. Since the days of the German protectorate the resources, geography and people of Damaraland have been often and copiously illustrated and studied.

The publication of Galton's *Tropical South Africa* led to a letter from Charles Darwin, the first of a fairly long series, and marking the resumption of an old acquaintance. It runs as follows:

13, SEA HOUSES, EASTBOURNE, SUSSEX. *July 24th, 1853.*

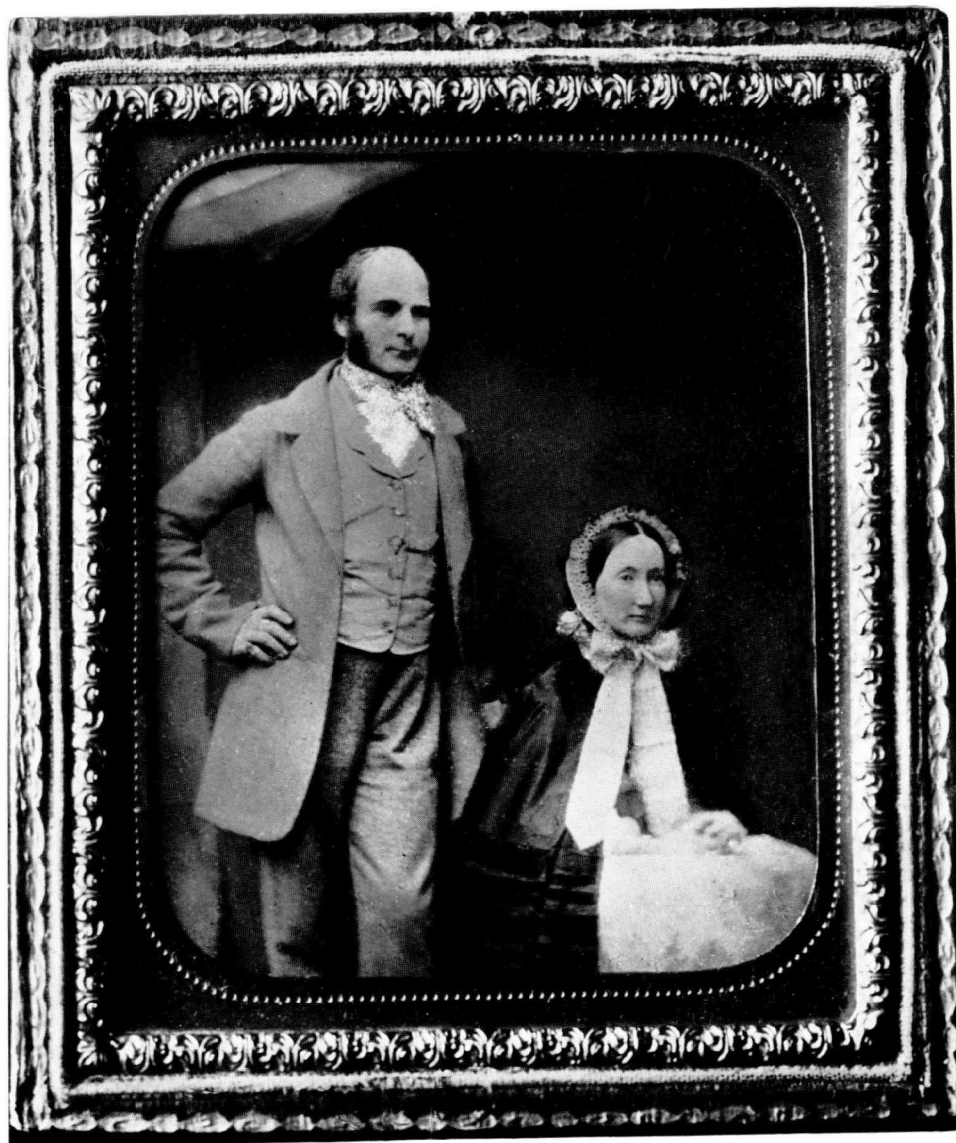
DEAR GALTON,

You will probably be surprised, after the long intermission of our acquaintance, at receiving a note from me; but I last night finished your volume with such lively interest, that I cannot resist the temptation of expressing my admiration at your expedition, and at the capital account you have published of it. I have no doubt you have received praise, from so many good judges that you will hardly care to hear from me, how very much I admire the spirit and style of your book. What labours and dangers you have gone through: I can hardly fancy how you can have survived them, for you did not formerly look very strong, but you must be as tough as one of your own African waggons!

If you are inclined at any time to send me a line, I should very much like to hear what your future plans are, and where you intend to settle. I so very seldom leave home, owing to my weakened health (though in appearance a strong man) that I had hardly a chance of seeing you in London, though I have often heard of you from members of the Geographical Society.

I live at a village called Down near Farnborough in Kent, and employ myself in Zoology; but the objects of my study are very small fry, and to a man accustomed to rhinoceroses and lions, would appear infinitely insignificant.

We have come to this for a few weeks for sea-bathing with all our children, now numbering seven.



FRANCIS GALTON AND HIS WIFE (Louisa Jane Butler).
In early married life. From a photograph in the possession of
Mr Wheeler Galton at Claverdon.

I should very much like to hear something about your brothers Darwin and Erasmus: I very distinctly remember a pleasant visit at the Larches, Heaven knows, how many years ago, and having many rides with them on ponies, without stirrups. The only member of your family whom I have seen for years, is Emma, who gave myself and wife a very cordial greeting at the British Association at Birmingham, some few years ago.

I do not know, whether I ought not to apologise for troubling you with this note, but the spirit which makes me write, must be my excuse. Pray believe me,

Yours sincerely,

C. DARWIN.

In the summer of 1852 (June 14) Galton wrote a letter to the Royal Geographical Society urging the want of proper instruments for travellers, and we note therein the development of his interest in the study of the art of travel, to which we must return later. But he needed rest and he appears to have suffered from low fever, which was not completely dispelled by a yachting tour with Sir Hyde Parker to Scotland and Norway. The winter was therefore spent at Dover, his mother and sister Emma nursing him. Here at a Twelfth Night party in 1853 Galton met for the first time Miss Louisa Butler. Early in March Miss Emily Butler writing to her brother A. G. Butler reports that "the lion-killer certainly seems smitten." Galton returned in March and Miss Butler in April to London, where they again met, went together to the Crystal Palace, and returned engaged. On the day—April 27—of Miss Butler's return to Peterborough, Galton finished his *Tropical South Africa*; three days later the Dean, her father, died suddenly at luncheon, and Francis Galton arrived the same evening to look only on the dead face of the man, who should have welcomed his daughter's future husband. There is little doubt that this sad initiation bound with unusual closeness the links between Galton and his wife's family.

Only one other characteristic picture of the Galton of these days has reached my hands. It is again in a letter of Miss Emily Butler to her brother of May, 1853.

"Mr Galton's book is *very* jolly, and gives one a high idea of his resolve and prudence; the latter quality is so strongly developed that he has to have hats made for him! He has got such a fine medal from the *R. G. S.* When it was given him, the President said very fine things of him, but regretted that so spirited an adventurer was going to be spoilt and married. Mr G. says it was very well put or he would have thrown the decanter at the worthy President.

"Mr G. came yesterday fresh from the Derby! I felt so pleased to have such a sportive relation. It was a splendid day at Epsom, and he was very happy wandering among the gypsies etc. He tells such rich stories and very neatly. He has been to spirit-rappings¹ and had another conversation in Damara with a deceased chief of that tribe. Is not that wonderful, for Mr Galton is the only man in Europe who knows Damara. The chief promised to go abroad with him, which is a pleasant look-out for Loui!"

The marriage of Francis Galton and Louisa Butler took place on August 1, and was followed by a tour in Switzerland and Italy, the winter being spent partly in Florence and partly in Rome. The return to England in March, 1854, was largely followed by visits, and on August 6 the Galtons again left for an extended tour in France. Hardly till the summer of 1855 did Galton settle down to steady research, but from that year onwards there is scarcely a year which does not bring its definite piece of noteworthy research, and Galton's scientific production now becomes the story of his life. The extended continental tours continued throughout a long life, but they were holidays, and, however they extended his field of observation, they had no longer to do with scientific exploration. But what Galton had learnt in his African journeys, became the fund on which he drew for his *Art of Travel*, 1855, and for those lectures at Aldershot on the *Arts of Campaigning* (1855-6), by which he endeavoured to supply the "helplessness of our soldiers in the most elementary matters of camp-life," a helplessness the Crimean War was emphasising in the most potent and cruel of manners. These subjects will be dealt with in the following chapter.

¹ Francis Galton enters under the events of 1853—"spirit-rapping mania."



FRANCIS GALTON AND HIS WIFE (Louisa Jane Butler). In middle life.