

THURSDAY, SEPTEMBER 25, 1873

AFRICAN TRAVEL

The Lands of Cazembe. Lacerda's Journey to Cazembé in 1798. Translated and annotated by Captain R. F. Burton, F.R.G.S.; also, Journey of the Pombeiros, P. J. Baptista and Amaro José across Africa from Angola to Tette on the Zambize. Translated by B. A. Beadle; and a *Résumé* of the Journey of MM. Monteiro and Gamitto. By Dr. C. T. Beke. (Published by the Royal Geographical Society; John Murray, 1873.)

The African Sketch Book. By Winwood Reade, with maps and illustrations, in two volumes. (Smith, Elder and Co., 1873.)

THESE are extremely different kinds of books, though both are valuable. The first is almost unreadable except by geographical students; the second is thoroughly popular and amusing. The pending explorations of Livingstone have given a special interest to the various journeys of Portuguese explorers, and the Royal Geographical Society have done well in making the records of these journeys accessible to English readers. The earliest and most important is that of Dr. De Lacerda, who went on a Government mission to the capital of Cazembé, situated at the southern extremity of Lake Moero, about 500 miles north-west of Lake Nyassa. He died on the way, but the journey was concluded under the second in command. The Journal is given at length, and is very dull reading, except for the insight it gives into the character of the numerous Portuguese and half-castes who accompanied the expedition, and who were in a continual state of squabble from the first day to the last. Dr. De Lacerda was evidently an amiable and intelligent man, and his notes are comparatively pleasant reading, and give some little notion of the country and the people. The Journal of his successor, an ecclesiastic (Fr. Pinto), is, however, so exclusively occupied with a record of the disputes among the members of the expedition, that it was hardly worth printing. Capt. Burton's translation is very free, and no doubt very accurate, but he is so idiomatic as almost to require translating himself; and such terms as "loot," "dash," "notions," and "magotty heads," which are repeatedly used, are hardly characteristic of the serious and matter-of-fact diary of the Portuguese explorers. His notes are very copious, often considerably exceeding the text, and some of them are instructive; but we find in them too many onslaughts on Mr. Cooley, and endless minute criticisms on African orthography. The free statement of Capt. Burton's peculiar views on civilisation, religion, polygamy, and other matters, is also rather out of place. We are told for instance that, to Capt. Burton, "Alexander is the first person of the triad which humanity has as yet produced; the other two being Julius Cæsar and Napoleon Bonaparte," and that "Blakeley guns and railways" are the indices of true progress.

If, however, this part of the book is dull, the second part—the Route Journal of the Pombeiros—is dreary in the extreme. We have page after page of such entries as these:—"Friday, 12th—At seven in the morning we got up and left the top of the hill. We passed seven narrow streams which run into the Luapula. We came to another

desert near a narrow river where we found a circle made. We met nobody and walked with the sun in our front." In the third part we are spared the detailed journals and are given a *résumé* by Dr. Beke, in which we have all that is of interest compressed into a few pages. These journals show that African travel was beset with the same difficulties and troubles seventy years ago as it is now, and that the custom of exacting presents and causing delays at every village is an ancient African institution. The work is illustrated by an excellent map, in which all the geographical information to be extracted from these journeys is laid down, and the routes of all the travellers, as well as those of Livingstone, distinctly marked. It will therefore be of great value in tracing the future progress of that illustrious traveller.

Mr. Winwood Reade's well-named "African Sketch Book" is a work of an altogether novel kind. In a series of picturesque and sparkling chapters he gives us sketches of the various pictures of African life and scenery, episodes of travel, the slave trade, the history of African exploration, and other subjects; and interspersed with these are little tales illustrative of the various phases of native life or of European life in Africa. Mr. Reade has twice visited Africa. The first time, in 1862-63, he went over Du Chaillu's ground, and enabled us to separate the true from the imaginative in that traveller's book; and he also visited Angola and Senegambia. The second time, in 1868-70, he spent two years in Africa, on the Gold Coast and Liberia, and made an adventurous journey from Sierra Leone to the Niger, at a point never before reached by a European traveller. The narrative of this journey occupies about half the second volume, and is very interesting; although it is perhaps a little marred by the sketchy style in which it is written (in the form of letters to a young lady), and by the prominence given to the author's fears, hopes, and ambitions, all of which will, however, prove attractive to many readers. When within about fifty miles of the Niger, at Falaba, the traveller was stopped by a native king, Sewa, who kept him in his court, as Speke was kept, for several months, and then allowed him to return to Sierra Leone, sending with him an embassy and his own nephew, as an escort. Mr. Reade then endeavoured to get the Governor of Sierra Leone to send him on an expedition to the Niger, in which case Sewa would not have dared to stop him; but finding that there would be great delays before this could be arranged, he took the bold resolution, although seriously ill, to return at once with the king's nephew. He did so, and telling the king, who was greatly surprised to see him, that he was now a traveller going to the Niger, but would stay with him three days, he was allowed to go on, and not only succeeded in reaching the Niger at a point about forty miles from its source, but went down its course to the north-east to the Bouré gold works, never before visited by any European. This journey undoubtedly stamps Mr. Reade as a thorough African explorer.

The six years' interval between his two journeys was devoted to a study of the literature of African travel, some of the results of which are embodied in a large and very useful map, showing at a glance the portion of the country visited by each traveller, as well as the various authorities which may be consulted on each district; and the comparative importance of these is indicated by the type in

which the name is printed. The chapter entitled "The African Pioneers," is a very interesting one, giving a spirited sketch of the life and labours of each of the important African travellers from Ledyard to Livingstone; and we think Mr. Reade could do no better or more popular work than to give us in a compact and readable form, and as much as possible in each author's own words, the concentrated essence of those vast piles of volumes on Africa, which he appears to have waded through.

There is a very great improvement in this work over Mr. Reade's earlier writings, and he himself recognises that his opinions are now changed for fairer and truer ones. He now speaks of the Negro race with respect, and often uses the term "native gentleman." He believes that "if boys were removed at an early age from uncivilised society and brought up with the sons of gentlemen at home, they would acquire something better than book-learning—namely the sentiment of honour. My long and varied experience of the African Race has brought me to believe that they can be made white men in all that is more than skin-deep." He speaks well of the native Missionaries, and says of one of them at Sierra Leone, of whom he saw a good deal, that he "does not differ, so far as I can see, from an English gentleman and clergyman in manners, speech, or disposition." Such men have far more influence with the natives than English clergymen can have. "An ordained Negro is a walking sermon, a theological advertisement. The savages regard an Oxford Master of Arts as a being fearfully and wonderfully made, belonging to a different species from himself. His argument invariably is, 'White man's God, he good for white man; black man's God, he good for black man.' But when he beholds a man as black as himself with a shiny hat, a white cravat, glossy garments, and shoes a yard long, wearing a gold watch in his fob, blowing his nose in a cloth, and 'making leaves speak;' and when he is informed that these are the results of being baptised, he also aspires to become a white man, and allows himself to be converted."

Good service is done by pointing out that what is usually called the typical Negro with jet-black skin, thick lips, and flat nose, is by no means typical, but is an extreme and exceptional type; that coffee colour of various shapes is the characteristic colour of Negroes, that their features are often finely formed, and of quite a European cast. Blackness of skin is said to be most prevalent where heat and moisture are combined, but it is recognised that this is not necessarily, or even probably, the cause of the blackness.

Mr. Reade's book is full of brilliant or witty sayings. Of the gorilla he says that "there is little doubt that some day or other this renowned ape will make its appearance at the Zoological Gardens, to brighten the holiday of the artisan, and to alleviate the sabbath of the fashionable world." Relating how a man once refused to guide him to a plantation about three miles off, for fear he should kill some game on the way and compel him to carry it, he remarks, "And yet it is often asserted that the Negroes are incapable of foresight." The natives of the interior firmly believe that Europeans buy slaves to eat, and an old cannibal Fan was anxious to know why they took the trouble to send so far for people to eat. Were the black men nicer than the white men? Mr. Reade's

answer was dictated by motives of policy, as he was in a cannibal country. He assured his questioner that white men's flesh was a deadly poison, and so they were obliged to import their supplies! Of Livingstone it is remarked that "only twice in his life since he was a youth has he visited England, returning after a while to his true home in the wilderness, with his health shattered by the toils of literary composition."

We find also many passages of good or of doubtful philosophy. Mr. Reade seems impressed with the strange idea that if we could by any means double the number of our tall chimneys in the cotton districts, we should necessarily advance our civilisation and benefit the human race. For example, among arguments for opening up the Niger we are told:—"The country which lies beyond the confluence of the Quorra and the Binuè is one of the largest cotton-growing areas of the world. At present the people dress themselves. But when the Niger trade is once established, our cheap cotton goods will soon destroy the native industry, and the people will export their raw cotton instead of weaving it themselves." And as one of the main results of the blood and treasure expended on African soil, we are told that "new markets have been opened for British manufactures." But does it not occur to Mr. Reade, that to destroy native industries instead of improving them may not advance a people; and that to increase the already large proportion of our population who pass their lives in a monotonous routine amid the smoke of furnaces and the din of machinery, and helpless as infants if their own source of living fails them (as it has failed them and may again), may not really advance us on the road to civilisation?

As an example of the manner in which our author often compresses into a few lines the results of much labour, take the following passage summarising the results of Nile exploration and the relative share of the two great branches in forming the River Nile and the Land of Egypt:—"Thus the Nile is created by the rainfall of the Equator, and Egypt by the rainfall of the Tropics. If the White Nile did not exist, the Black Nile would be nothing—it would perish in the sand. But if the Black Nile did not exist, the White Nile would be merely a barren river in a sandy plain, with some Arab encampments on its banks."

The arrangement of this book seems to be its weakest point. We are taken up and down the coast, and back again over old ground, till we hardly know where we are; and the confusion is increased by the insertion of the illustrative tales in the body of the work. It would have been far better if these tales had been kept together, and the rest of the work arranged in systematic geographical order. The work is provided with numerous good woodcuts; and the maps, which illustrate in a novel and ingenious manner the slave trade, the religions of Africa, African discovery, and African literature, are very valuable. The tales themselves are clever, and some admirably illustrative of African life; but most of them are melancholy in their catastrophes, and indicate that the author takes a somewhat gloomy view of human life and human nature. Of these, "Ananga" is the best. It is the story of a daughter of the King of Cazembé, who marries a Portuguese officer and runs away with him; and, arriving in the Cape Colony, is so overwhelmed by

the rush of new ideas excited by one after another of the wonders of civilisation, that she dies, like the Lady of Burleigh, overcome

“By the burthen of an honour unto which she was not born.”

It is altogether a charming story, and is written in a style which we hope Mr. Reade will cultivate.

In justice to the author, it must be stated that the present work is intended for family reading, and to popularise a knowledge of modern Africa. He promises a more serious book, treating of many subjects in connection with the native races, of great interest to students of man; and this will be looked forward to with interest, since few men are now better qualified than Mr. Reade, both by travel and study, to tell us the real truth about the Negro.

ALFRED R. WALLACE

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. No notice is taken of anonymous communications.]

Tait and Tyndall

[WE have received further communications from Professors Tyndall and Tait on the subject of the correspondence that has appeared in our columns. We feel that we are only consulting the true interests of Science in declining to print further communications on a subject which has assumed somewhat of a personal tone, and in this idea we are supported by many of the best friends of both parties, who, however, will approve of our giving the following brief extract from Dr. Tyndall's communication:—"My letter was rapidly written, and the proof of it reached me, not on the Tuesday evening, as I expected, but on the Wednesday morning when I was in the midst of my preparations for Bradford. I had therefore little time to give it the calm thought which it ought to have received. On re-reading it I find two passages in it which I think it desirable to cancel. The first is that in which I speak of lowering myself to the level of Prof. Tait; the second that in which I reflect upon his manhood. These passages I wish to retract."—Ed. NATURE.]

On the Males and Complemental Males of certain Cirripedes, and on Rudimentary Structures.

I BEG permission to make a few remarks bearing on Prof. Wyville Thomson's interesting account of the rudimentary males of *Scalpellum regium*, in your number of August 28th. Since I described in 1851, the males and complemental males of certain cirripedes, I have been most anxious that some competent naturalist should re-examine them; more especially as a German, without apparently having taken the trouble to look at any specimens, has spoken of my description as a fantastic dream. That the males of an animal should be attached to the female, should be very much smaller than, and differ greatly in structure from her, is nothing new or strange. Nevertheless, the difference between the males and the hermaphrodites of *Scalpellum vulgare* is so great, that when I first roughly dissected the former, even the suspicion that they belonged to the class of cirripedes did not cross my mind. These males are half as large as the head of a small pin; whereas the hermaphrodites are from an inch to an inch and a quarter in length. They consist of little more than a mere sack, containing the male reproductive organs, with rudiments of only four of the valves; there is no mouth or alimentary canal, but there exists a rudimentary thorax with rudimentary cirri, and these apparently serve to protect the

orifice of the sack from the intrusion of enemies. The males of *Alcippe* and *Cryptophialus* are even more rudimentary; of the seventeen segments which ought to be fully developed, together with their appendages, only three remain, and these are imperfectly developed; the other fourteen segments are represented by a mere slight projection bearing the probosci-formed penis. This latter organ, on the other hand, is so enormously developed in *Cryptophialus*, that when fully extended it must have been between eight and nine times the length of the animal! There is another curious point about these little males, viz., the great difference between those belonging to the several species of the same genus *Scalpellum*: some are manifestly pedunculated cirripedes, differing by characters which in an independent creature would be considered as of only generic value; whereas others do not offer a single character by which they can be recognised as cirripedes, with the exception of the cast-off prehensile, larval antennæ, preserved by being buried in the natural cement at the point of attachment. But the fact which has interested me most is the existence of what I have called Complemental Males, from their being attached not to females, but to hermaphrodites; the latter having male organs perfect, although not so largely developed as in ordinary cirripedes. We must turn to the vegetable kingdom for anything analogous to this; for, as is well known, certain plants present hermaphrodite and male individuals, the latter aiding in the cross-fertilisation of the former. The males and complemental males in some of the species of three out of the four very distinct genera in which I have described their occurrence, are, as already stated, extremely minute, and, as they cannot feed, are short-lived. They are developed like other cirripedes, from larvæ, furnished with well-developed natatory legs, eyes of great size and complex prehensile antennæ; by these organs they are enabled to find, cling to, and ultimately to become cemented to the hermaphrodite or female. The male larvæ, after casting their skins and being as fully developed as they ever will be, perform their masculine function, and then perish. At the next breeding season they are succeeded by a fresh crop of these annual males. In *Scalpellum vulgare* I have found as many as ten males attached to the orifice of the sack of a single hermaphrodite; and in *Alcippe*, fourteen males attached to a single female.

He who admits the principle of evolution will naturally inquire why and how these minute rudimentary males, and especially the complemental males, have been developed. It is of course impossible to give any definite answer, but a few remarks may be hazarded on this subject. In my "Variation under Domestication," I have given reasons for the belief that it is an extremely general, though apparently not quite universal law, that organisms occasionally intercross, and that great benefit is derived therefrom. I have been laboriously experimenting on this subject for the last six or seven years, and I may add, that with plants there cannot be the least doubt that great vigour is thus gained; and the results indicate that the good depends on the crossed individuals having been exposed to slightly different conditions of life. Now as cirripedes are always attached to some object, and as they are commonly hermaphrodites, their intercrossing appears, at first sight, impossible, except by the chance carriage of the spermatic fluid by the currents of the sea, like pollen by the wind; but it is not probable that this can often happen, as the act of impregnation takes place within the well-enclosed sack. As, however, these animals possess a probosci-formed penis capable of great elongation, two closely attached hermaphrodites could reciprocally fertilise each other. This, as I have elsewhere proved, does sometimes, perhaps often, actually occur. Hence perhaps it arises, that most cirripedes are attached in clusters. The curious *Anelasma*, which lives buried in the skin of sharks in the northern seas, is said always to live in pairs. Whilst reflecting how far cirripedes