

curve in the back, it is probably the effect of extreme fat, which was considered a beauty, as in South Africa at present." Rawlinson (*Ancient Egypt*, 1893) is still more emphatic when he states, "She belonged, more probably, to one of the dwarfish tribes of which Africa has so many, as Dokos, Bosjesmen, and others."

The land of Punt is generally supposed to have been south-eastern Arabia or some point along the southern Somali coast; the spices, resins, and incense products being in favour of the former; the giraffes, ivory, cynocephalous apes, and the like speaking for the latter. Frobenius ("Das unbekannte Afrika," 1923) has shown in a map the distribution of houses on piles such as were seen by these voyagers to Punt. None such are to be found in Arabia or Somaliland; but they are found on the big rivers of Africa southward from Somaliland. Resins and snuffs have the highest of values amongst the Bush people even in modern times. I do not say that the data are conclusive to prove that God's land, Punt, lay in Africa south of the Zambezi, but the facts are highly suggestive. The products of the country—people, animals, gold, resins, pigments, and the like—were such as this country certainly was affording in plenty at that remote period. At the same time, it is a well-recognised fact that for centuries, perhaps millennia, prior to Queen Hatshepsu, ships had been navigating the Red Sea, the open ocean, and the Persian Gulf between Egypt and Mesopotamia. It is not reasonable then to imagine that the Egyptian queen would render herself a laughing-stock before the civilised world by celebrating in the building and decoration of a new temple as extravagant marvels the products of places near by like the coasts of Arabia and Ethiopia. To fit out an expedition for this remote South-land of Punt was always an epochal event, and was carried out only by the greater Pharaohs in times of peace and prosperity, and was even then worthy of record. Such expeditions are recounted in the times of Sankh-ka-ra (Dynasty XI.) under the nobleman Hannu, of Hatshepsu, of Thothmes III.—the Napoleon of Egyptian history—and of Horemheb (all three of Dynasty XVIII.), and of Rameses III. (Dynasty XX.). It is absurd to believe that these proud names in Egyptian history would reckon trips to little beyond the mouth of the Red Sea as worthy of mention when the equipment of voyages three years in duration were commonplace in the chronicles of the pigmy court of Solomon. Even in the humdrum days of Herodotus, one circumnavigation of Africa had not been entirely

forgotten, for he relates how King Necho's Phœnician servants had accomplished this hardy feat.

His Honour the Administrator of the Transvaal (Prof. Jan H. Hofmeyr) has informed me that the remains of what was presumably an ancient galley were discovered during the laying out of the Maitland Cemetery on the Woltemade flats near Cape Town in the 'nineties. At that time the contact of one end of Africa with the other by navigation was undreamt of, and the significance of finding a boat, one hundred and eighty feet in length, buried six feet underground at a distance of three miles from the present coast-line, was lost on the workmen, who utilised it for firewood. The event at least indicates that the followers of Prince Henry were not the first to anchor in Table Bay.

The continuity of the Atlantic and Indian Oceans around the southern extremity of Africa was customarily portrayed by the ancient cartographers of Greece (*e.g.* Globe of Crates), of Arabia (*e.g.* Idrisi), and of Europe from Venice to Anglo-Saxon England (*vide* "Encycl. Britt."). It is difficult to understand how such conceptions could have grown up and persisted in this fashion unless the experiences of ancient voyagers had provided some foundation for them. It is likely that the voyage of Necho's servants was but a repetition of many similar ventures in the storied past. In any case the tale provided by Herodotus is more easily believed when we know that Bushmen from the Zambezi to the south-eastern corner of the continent on the shore-coast and for hundreds of miles inland have recorded in portrait the arrivals and the activities of not merely one but untold numbers of invaders at successive historical epochs.

It is not in the contact of any one people but in the endless procession of emissaries of every great navigating power in the Indian Ocean down this coast that one finds an explanation of the prodigious extent of the early mining industry of Southern Africa. Moreover, it is only in terms of this procession that the physical, anthropological, and ethnological problems of this country can be adequately understood. It is impossible here to do more than direct attention to certain aspects of these intricate but highly fascinating studies. It has already been stated that no exhaustive anthropological survey of the region concerned has been made; but if the urgent necessity for such a survey of the paintings, ruins, terraces and mines, and the nature and richness of its prospective fruits, are indicated, these meagre notes will have been justified.

Biographical Byways.¹

By Sir ARTHUR SCHUSTER, F.R.S.

12. ESMATT EFFENDI.

I AM not aware that any publication of Esmatt Effendi has ever seen the light of day, but nevertheless my readers, I hope, will agree that his name deserves to be included in this collection of reminiscences. He certainly possessed two essential qualities, enthusiasm and perseverance. I made his acquaintance at Suez, on the evening of May 3, 1882, when, on behalf of the Khedive of Egypt, he received a party sent out under the auspices of the

Royal Society to observe the total eclipse of the sun that was to take place on May 17 at Sohag, some way up the Nile. He gave us a very promising account of the local facilities, more especially with regard to bricks and mortar for the foundations on which to place our telescopes; and if his predictions did not come true, and the only brick we saw was that aimed at the head of one of the party by an inhabitant of the village, his intentions were undoubtedly good.

Esmatt Effendi had an ambition to learn something about astronomy, and showed great interest in a

¹ Continued from p. 385.

sextant that I had taken out to check our chronometers. He begged me to teach him its use. After a few lessons, I found him one day trying to find the image of the sun in an artificial horizon, having pushed all dark glasses out of the way. I had warned him against this, and got rather angry with him. He replied, "I am an Egyptian, and I cannot see the sun with the dark glasses. When an Egyptian says he is going to do something he is going to do it, and I am going to see the sun through this sextant even if I lose my eyesight." I had to lock up the sextant.

It was some years before I heard of Esmatt again. Through diplomatic influence, the Naval Observatory at Washington had been persuaded to take him in as a kind of apprentice. They found him, as I had done, persevering and enthusiastic, but incapable of assimilating any knowledge. They tried to persuade him to return home and take up some other occupation, but Esmatt Effendi had made up his mind to stay. The authorities of the Observatory learned afterwards that all the time he was half starved, and had to sell his books and a great part of his clothing to pay for his board and lodging. Matters ultimately reached a crisis and he was told to leave. He finally consented, on condition that the authorities would give him a testimonial which would enable him to find a position at home. They considered the matter, and ultimately resolved that it was worth while to stretch a point, and they sent him the requested testimonial. To their surprise, they found Esmatt again at his desk next morning. He was reminded that they had kept their part of the bargain and that he must keep his. Esmatt stood up, took the testimonial out of his pocket, waved it in front of their faces, and said, "The man who deserves this testimonial deserves to work in the Observatory of Washington." The rest of this story, which I give on the authority of

one of the principal astronomers concerned, must be left to the imagination.

CONCLUSION.

It is with some hesitation that I conclude these reminiscences with the account of an incident that revives painful recollections, and the publication of which I should, for obvious reasons, have preferred to be left over until after my death. It concerns a distinguished personality whose memory is cherished by many friends, but their ranks are now rapidly thinning, and for this reason I feel compelled to disregard personal considerations.

Early on during the War, I was one morning surprised to find paragraphs in the daily press implying that a wireless apparatus had been found and "seized" in my house, with more or less veiled references to the purpose for which the apparatus was likely to have been erected. The complete story may be told some day; at present it is sufficient to say that I do not blame the newspapers.

Though I knew that the implied accusation was not likely to impress my friends, the matter, in view of my position at the time, was serious, and it was with fear and trembling that I entered the Athenæum a few days later and selected a solitary place in the coffee-room. I was leaving again directly after luncheon, and as I was putting on my coat in the hall I suddenly felt some one stepping up behind to help me. Surprised at this politeness, which is somewhat unusual in the Club, I turned round and looked into the kindly face of Lord Roberts, with whom I had no personal acquaintance. The hall was then full of members of the Club, and it was obvious that the action was intended to be, and in fact was, a demonstration. Such incidents are not likely to be forgotten.

Obituary.

PROF. W. A. HASWELL, F.R.S.

THROUGH the death of Prof. W. A. Haswell, at the age of seventy-one, zoology has lost one of its foremost exponents, and the University of Sydney a teacher and investigator of world-wide reputation.

William Aitchison Haswell was born in Edinburgh in 1854, and was educated at the Edinburgh Institution and the University, where he gained the Bell-Baxter Scholarship as the most distinguished natural science graduate of his year. As quite a young man he went out to Australia and, settling down in Sydney, there spent the rest of his life. In 1880 he held the post of curator of the Queensland Museum. Then, returning to Sydney, he delivered public lectures on zoology, and became in 1882 acting curator of the Australian Museum, and published his valuable Catalogue of the Australian sessile- and stalk-eyed Crustacea. In the same year he was appointed lecturer in zoology and comparative anatomy in the University of Sydney, under Prof. W. J. Stephens, who at that time held the chair of natural history. Young and enthusiastic, Haswell threw himself with great energy into the study of the rich fauna of Port Jackson and the adjacent coasts, and in the course of a few years published, in the Proceedings of the Linnean Society of New South

Wales, numerous papers, mainly of a systematic character, on the Crustacea, Annelida, and Bryozoa of the Australian seas. In particular we owe to Haswell the first description, in 1882, of the giant Phoronis that occurs in Port Jackson, which he named *Ph. australis*, and in the same year he exhibited drawings of the early stages of its development before the Linnean Society.

During this period, however, Haswell by no means confined himself to invertebrate zoology, but contributed to the Linnean Society valuable papers on vertebrate morphology, on such diverse subjects as the anatomy of birds, the structure of the paired fins of Ceratodus, the skeleton of elasmobranch fishes, and the early stages of the development of the emu (1887). He also described in 1886 in the *Q.J.M.S.* the remarkable striate muscle fibres in the "gizzard" of the polychæte worm *Syllis*, and in 1889 published a very interesting comparative study of the same fibres. In 1888, also in the *Q.J.M.S.*, he gave the first detailed account of the anatomy of that remarkable ectoparasitic trematode, *Temnocephala*, a form which will always be associated with his name.

Such was the reputation Haswell had established for himself as an original investigator and teacher that the Senate of the University of Sydney, when the