A FORGOTTEN ANTHROPOLOGIST—
SURGEON-MAJOR GEORGE WILLIAMSON, ARMY MEDICAL SERVICE.

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Of Surgeon-Major George Williamson, M.D., the man and the officer, I know but little. A native of Peeblesshire, he was born on March, 6th, 1819. He appears to have taken the Diploma of the Royal College of Surgeons of Edinburgh in 1838, and was granted the M.D. of the University of Edinburgh in the year 1840 for a thesis on lithotomy. He entered the Army Medical Service as an Assistant-Surgeon on March 26th, 1841, and was promoted successively, Surgeon in 1849, and Surgeon-Major in 1851. He served in India from 1849 to 1855, was in Turkey and the Crimea from January to July, 1856, and spent from April, 1860, to October, 1861, at the Cape of Good Hope. He died on October 31st, 1865. Unfortunately, I have been unable to find any obituary notice of him in the Lancet of that year. The above meagre details are all that seem available with regard to Surgeon-Major Williamson's military career.

Having recently had an opportunity of inspecting the collection of human skulls now deposited in the Museum of the Royal Army Medical College, at Millbank, London, I have been greatly impressed by the manuscript catalogue prepared by this enlightened officer. At the time when this collection was first formed, physical anthropology was still in its infancy. To Blumenbach is due the credit of having first aroused an interest in this subject, an interest which was steadily maintained by the work of his numerous disciples on the Continent, and which spread alike to America, where, in 1839, that philosophical anatomist, Morton, published his classic treatise on the "Crania Americana." As yet little had been done in a systematic manner in this country. In a general way, the subject had been treated by Lawrence, Prichard, Latham and Knox; but if we except the anatomical description of the human crania and skeletons published by Owen in the catalogue of the

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1 For these details I am indebted to Lieutenant A. Irvine, Fortescue, R.A.M.C.
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Osteological Series of the Museum of the Royal College of Surgeons of England (1853), there was no work strictly confined to the ethnological bearings of craniometry prior to the appearance of Surgeon-Major Williamson's catalogue in the year 1857. At that time, the collection of which he was in charge was housed in the cellars of Fort Pitt, Chatham, then the headquarters of the Army Medical Department. Subsequently, however, the skulls were transferred to the Museum at Netley Hospital, and have recently been brought to the Royal Army Medical College, Millbank, London, where they are now lodged, and where they will, I trust, be open to the inspection of all interested.

Williamson's catalogue first appeared in print in the pages of the Dublin Quarterly Journal of Medical Science in the year 1857. It was subsequently reprinted in pamphlet form by MacGlashan & Gill, of Dublin, but unfortunately in neither instance, owing no doubt to the question of expense, were the elaborate tables of measurement included, a few only, in which some of the results were summarised, being published.

The appearance of this catalogue, now all but forgotten, was undoubtedly the pioneer work of its kind in this country, for be it remembered that the "Crania Brittanica" of Thurnam and Davis was not published till 1865, and Barnard Davis' "Thesaurus Craniorum" did not see the light till 1867. It is pleasant to know, however, that Williamson's work did not altogether escape recognition, for I find on consulting the historical account of the subject furnished by Topinard in his "Elements of General Anthropology," that that author speaks of the catalogue as a very remarkable production, and lays particular stress on some of Williamson's observations. Busk, too, whose name is familiar to all English anthropologists, in a review which was published in the Natural History Review (October, 1862, p. 359), pays a high tribute to Williamson's "very valuable and interesting account of the collection of crania at Fort Pitt." Davis also, in the preface to his "Thesaurus Craniorum," duly recognised his work.

Unfortunately, owing to the ephemeral and incomplete form in which the catalogue was published, Williamson's work has not received, in these later days, that attention and recognition which it deserves. I have endeavoured to obtain a copy of the pamphlet, but hitherto without success. The only copies I have as yet had an opportunity of examining are, one in the Bodleian Library,

1 "Éléments d'Anthropologie Générale," 1885.
where I found it in strange company, bound up with, amongst others, a tract by Spurgeon on "How I became a Baptist," and a sermon by an eminent Divine on "Growth in Grace and Knowledge"; and another, an interleaved copy which Williamson presented to the Library of the Royal College of Surgeons of England. This specimen is one of great value, because it is illustrated by forty-four photographs of skulls in the collection. These photographs, the size of which is 5 in. by 4 in., are silver prints, and, notwithstanding the fact that they are now 50 years old, are still, despite a tendency to yellowishness, in a good state of preservation.

Undoubtedly Williamson owed his inspiration to Morton; for we find in a comparison of his catalogue with the "Crania Americana," that he adopted the same measurements and tabulated many of his results in identical form. To Professor Owen, too, the Curator of the College of Surgeons' Museum, he no doubt was indebted for the interest he took in wormian bones and the arrangement of the sutures in the region of the pterion. But he was far from being a slavish follower of either of his masters' methods; for in the accounts he gives of his mode of making the measurements he says: "The facial angle of Professor Camper was at first taken by an instrument recommended by Mr. Morton, but this plan was found to be very tedious and required considerable time. . . . A very simple method was devised by which from thirty to forty angles could be taken in an hour. It would be impossible to make a description of it intelligible without the aid of a drawing. The accuracy of this instrument was tested in various ways and found to be correct." Possibly this instrument still survives amidst the lumber which accumulates in a museum; if so, it would be well worth preserving.

Unfortunately, unlike Morton, who by the generosity of friends was enabled to publish the results of his labours on the aboriginal American crania in a sumptuous volume, Williamson failed altogether to get adequate means to make known the results of his arduous researches. Reading between the lines, it can hardly be doubted that he applied for Government aid, for we find that under his editorship a catalogue of the pathological preparations in the museum was published by the Government, and distributed to every medical officer in the Service. Then, as now, the State seems to have failed in its duty to further scientific research.

Of the catalogue itself, with which I am only familiar in manuscript form, I cannot speak too highly. It embraces a description of over 450 skulls, together with detailed measurements of the
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same, amounting in all to over 8,000 observations; added to this there are generalisations of much value and numerous analytical tables. The author must have been a man of keen observation, for he was amongst the first to lay stress upon the value of the nasal aperture as an ethnic character. His researches, too, on the varying arrangement of the sutures in the region of the temporal fossa were remarkable, and foreshadowed, if they did not entirely anticipate, the results obtained by Anoutchine some twenty-five years later.

As an example of his pithy, descriptive style, and his powers of analysis, I may be permitted to quote his summary relating to the Hottentot and Bushman crania: “From the foregoing description of the Hottentot and Bushman skulls, it will be observed that there is a great resemblance, and that the Bushman presents the same characters in a more exaggerated form. They are both, however, entirely different from any other class of skull in the collection, looking at them collectively; although many of the characters when taken separately resemble the skulls of other races, such as the Ashanti, the Negro, and likewise the Malay. They do not in any particular resemble the Chinese. The similarity between the Hottentot and Bushman and the Ashanti skulls consists in both being of small size; the forehead smooth, high, well arched and nearly perpendicular with the bones of the face; the great breadth between the eyes; the nasal bones oblong and on the same plane; and the size and form of the nasal aperture. The alveolar processes are broad in front, but they project more in the Ashanti than in the Hottentot or Bushman, although in some of the Hottentots the alveolar processes project as much as in the generality of the Ashantis. In the Hottentot and Bushman the malar bones stand more prominently forwards and outwards, causing the face to have a broader and flatter appearance. The shape of the cavity is of an oval form in the Hottentot and Ashanti. The Bushman’s skull is of a square form. The points of resemblance between the Hottentot and Bushman, and the Malay are the broad, flat face, the outward projection of the malar bones, the frontal, nasal and malar bones and alveolar processes being nearly all on the same plane. In the Bushman and Malay the skull is of a square or round form, and the transverse diameter of the base of the skull is great, compared with the antero-posterior. However, on comparison, the difference is very striking; the Malay skull is large and capacious, with the nasal bones always more or less arched, the breadth between the eyes is great in both, and the
anterior nasal aperture is larger and wider. The Hottentot and Bushman's skulls are the smallest in the collection, and the nasal bones are on the same plane and flatter, with greater breadth between the eyes, than in any other skull. The anterior nasal aperture also approaches nearer to the Negro form. Although it has been stated that there are many points of resemblance between the Hottentot, the Bushman and the Malay, yet, on comparing the three classes of skulls, the Hottentot and Bushman have the greatest resemblance to the Negro, especially to the Ashanti, the Hottentot approaching nearer to them than the Bushman."

My interest in Surgeon-Major Williamson's work having been thus aroused, I was naturally anxious to know whether he had displayed like ability and energy in other branches of his profession. On consulting the "Index Catalogue of the Library of the Surgeon-General's Office of the United States Army," I find under his name the subjoined works:—


"Chirurgia Militare." Trad. dall' Inglese.


I am not competent to express an opinion on the merits of these surgical treatises, but from motives of curiosity I read the preface and introduction to his "Military Surgery." Therein I found much which seems to me characteristic of the man. Thus, in comparing the results obtained in cases of compound fractures due to gunshot wounds in the Mutiny with those in the Crimea, he writes, "Medical officers who have served in India are, I believe, unanimous in opinion that there is no means of transit for sick and wounded equal to the dooley; and should this be admitted by the public and Government, there seems no reason why our Indian subjects should not furnish us with a supply of dooleys and bearers in all our wars out in India." These words seem almost prophetic in view of our recent experience in South Africa.
Again, at the present time, when the Medical Service of the Army is being reorganised, it is interesting to note that Williamson, in the introduction to his "Military Surgery," lays stress upon the application of hygiene to the Army as a subject of the greatest importance; and further emphasises this point by quoting from a speech by Lord Herbert, the then Secretary of State for War, on the occasion of the opening of the Medical School at Fort Pitt in 1860, to the effect that the "objects contemplated by the Government in establishing this School were not only to give an acquaintance with the specialities of military medical life, but especially to teach the most approved methods of preventing disease." Another excerpt from the same address is not without interest at the present time. Lord Herbert went on to say that "He had just been reading a letter from the Adjutant-General with the Army in China. He conveyed the most gratifying accounts of the present excellent condition, as to health, of the China force; and it showed how much benefit had arisen from the appointment of a sanitary inspector. This was the first time such an appointment had been made. It was one of the new regulations, and was the result of the recommendation of the Royal Commission (1858)."

That Williamson was alive to the importance of tropical medicine is made clear by his remark to the effect "that the results of tropical diseases as revealed by post-mortem examinations can also be well studied at the General Hospital at Netley."

Enough has been said to prove that Williamson was a man of remarkable ability and foresight, one of whom the Service may be justly proud. Of his merits as a craniologist it is impossible to speak too highly. So far as I know, he was among the first, if not the first, to publish a systematic catalogue of any collection of human crania in this country. But apart from the mere labour of such an undertaking, he drew inferences and deduced conclusions which will stand good to the present day. Had his researches obtained a wider publicity, and enjoyed the advantages of publication in more permanent form, they would now have been the classic work on the subject in this country, just as Morton's account of the native aboriginal skulls holds the premier position in America.

Is it too late to suggest that some means should yet be taken to perpetuate Surgeon-Major Williamson's memory? Might this not be done by associating his name with the craniological collection of the Royal Army Medical College? The catalogue so far as it goes is almost complete. The records of the measurements could readily be translated into the metric system, and other obser-
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vations which recent advances have proved of most value could easily be added, so that the College could yet be the first in this country to publish a complete and carefully revised account, descriptive and statistical, of the skulls in its possession. It would be a fitting tribute to the memory of the man who bestowed such loving care on this collection in days gone by.

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Travel.

A TRIP THROUGH PORTUGAL IN 1905.
BY LIEUTENANT-COLONEL J. E. NICHOLSON,
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The following holiday trip may be undertaken at almost any time of the year, but as in Portugal the weather from December to March is apt to be wet and changeable, I would advise any of my friends who wish to see the country at its best—unless they propose to winter at Lisbon or Mont' Estoril—to postpone their sight-seeing until the advent of spring, when they can take their choice of any of the next eight consecutive months.

The best way to start visiting Portugal is to commence at either Lisbon or Oporto, preferably the latter. Both these cities can be reached by rail or steamer. I myself travelled by sea, and about six hours after leaving the Bay of Biscay the steamer anchored at sundown in the harbour of a place of which the name is written Leixões and pronounced "Leshoens."

About 9 a.m. the following morning those of the passengers who proposed staying in Portugal landed at Leixões, and, after due inspection of their passports and luggage at the Custom House, took the electric car to Oporto. Although this is perhaps a slightly longer journey than that taken by the steam trams (which take the inland route), it offers the more picturesque views, as it first follows the coast-line to Foz, at the mouth of the Douro, and then runs along the right bank of this beautiful river into the heart of Oporto. Like most of the English visitors to this town, I stayed at the Grand Hotel.

Oporto (in Portuguese, Porto) is the second largest city in Portugal, with a population of about 170,000, and its chief exports are wine and fruit. The first feature to attract one's attention is
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