

History of Medicine

The Cape and Sir Henry Marshall

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SUMMARY

Much is known of men who have contributed little of permanence to the history of medicine, but comparatively little is known of those men who have contributed much. Henry Marshall, who played a highly-significant part in military medicine, hygiene and sanitation, was one of the latter.

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It was at the Cape of Good Hope during the second British Occupation that Henry Marshall, as assistant-surgeon of the British forces, initiated what he was to develop and expand throughout his professional life, namely a wholly new concept of the value of an individual soldier's well-being for the maintenance of the general health and strength of a military force.

Marshall's professional life endured for more than 40 years; and perhaps by extracting the quintessence of his quality, I can give some substance to this article. If I say that the achievements of Florence Nightingale could be regarded as the complement to those of Henry Marshall, an inkling of his calibre might suggest itself.

Before the Crimean War in 1854, army medical services were not permanent, and were carried out in a somewhat haphazard fashion. There were expert advisers among officers of high rank, but there was no unified corps of officers and men as we know them today. In earlier campaigns, such as the Napoleonic wars, non-medical comforts and comforts were provided by the wives and sweethearts who were, in fact, camp-followers on active service. Gradually hospital staffs were formed, but it took the Crimean War and Florence Nightingale to realise the need for, and originate, a corps of men for the 'better care of the sick and wounded'.

Marshall's life-work was not concerned with the 'better care of the sick and wounded', but with the numerous causes which contributed to the sickness, mortality, unhappiness and ultimate degradation of the common soldier serving on garrison duty in various parts of the world, parts differing in climate, population, food, language and customs. He was to revolutionise the soldiers' ordinary way of life by completely changing the attitude of the administrative officers towards the soldier. And it all

started at the Cape during the nearly 2 years that Marshall was stationed here.

Marshall was born in the parish of Kilsyth in 1775. After a good college education he joined the Royal Navy as a surgeon's mate at the age of 28 years, without any special qualifications. A year of this was enough for him and he took his discharge from the Navy. In January 1805 he joined the Forfarshire Regiment of Militia which led to his appointment in April 1806 as assistant-surgeon to the 89th Foot. They embarked for the Cape of Good Hope, via South America, arriving in Table Bay on Christmas Day 1806. Marshall was posted, with his regiment, to Ceylon on 27 September 1808, but during his stay here he started a most significant method of statistical inquiry into the factors which affected the competence and health of soldiers. He was the first military medical statistician. Marshall continued this method of inquiry into environmental influences during his sojourns in Ceylon and India as a regimental medical officer, and later, after his promotion to the General Staff, in India and Scotland.

Marshall continued to 'excite attention to the means which might ameliorate the condition of the soldier and exalt his moral and intellectual character', until he died as inspector of hospitals of the British Army. 'He was the first to show how the various experiences of medical officers in the British Army, at home and abroad, by methodical arrangement and concentration, might be applied by the use of computation to furnish exact and useful results in medical statistics, medical topography, geographical relations of diseases, medical hygiene and almost every other branch of military medicine.' 'My greatest delight', he said towards the end of his life, 'has been to promote amelioration of the condition of soldiers, and in the prosecution of this important object, I hope I have done some good.' This, in his own words, constitutes the briefest summary of his life-work.

Some of his telling contributions to the War Office on the conditions under which soldiers served, the attendant miseries, the quality of the army itself, and his recommendations for their mitigation or eradication, can be summarised as follows. Marshall continued his work in Ceylon and India where he wrote on the medical topography of the interior of Ceylon and its effects upon the health of the troops stationed there during the years 1815-1820, and he added brief notes on the prevailing diseases. The great merit of this report was the statistics of the mortality and illnesses of the troops; this was a new feature of medical work and investigation.

On his return to Britain, he carried out a similar analysis in Scotland for the years 1816-1822. These numeri-

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cal analyses were attempts to collect and arrange facts to illustrate a relationship, for the first time, of the incidence of sickness and mortality for specific seasons in specific regions of the world.

Because the soldier's life was so often extremely miserable and desperate, he took to alcoholic intoxication for relief. Marshall concluded that the uniform and indiscriminate issue of spirit rations only led, ultimately, to the complete degradation of the serving soldier, although its purpose was to alleviate his hardships. So, for example, 6-7 ounces (about 200 ml) of spirit formed the daily ration, or part of the regular diet, of the soldier. This he was obliged to swallow—or throw away. Often this obligation to consume almost half a pint of strong liquor was carried out under the supervision of a commissioned officer. Marshall said 'a more successful plan for converting temperate men into drunkards could not have been invented'.

He compiled reports on the statistics of the army with observations on the military medical returns, sketches of the geographic distribution of disease among the troops of the Presidency of Fort George, Madras, observations on the influence of a tropical climate upon the constitution and health of 'natives from Great Britain', the sickness, mortality and invaliding of troops in the West Indies, all of which, when the facts were laid before the British parliament, produced what was tantamount to a reorganisation of military medical policy. This report did away with the old-established fallacy that Europeans became 'seasoned' by long residence in unhealthy regions. This 'seasoning', Marshall stated, was simply an alcoholic adaptation to misery. He showed also that the mortality was dependent on the soldier's age: young soldiers lived longer than older soldiers, however much seasoned by residence or disease. Marshall estimated that a soldier serving one year in Jamaica met with as much risk to his life as he would in 6 such battles as Waterloo, where 1 in 40 fell, for in Jamaica 1 out of every 7 died annually. This was the reason for the young soldier getting drunk and dying sooner.

It was his numerous contributions to statistics of sickness and mortality that brought about an almost unbelievable regard by senior army officers for the welfare of the serving soldier who, before Marshall's time, was treated with the utmost brutality. Nevertheless, from his reports one becomes aware of his wonder at the despair, the misery, and yet the ingenuity and dogged resolution that could bring a soldier to carry out such prolonged arduous duties under every kind of trial.

Marshall concerned himself not only with the serving conditions of the soldier's life but also with the sadder time when he was retired from service. He did much to

improve the pensioning off of the soldier so that he could feel some pride and self-respect for having served his country.

Towards the end of his life, in 1846, Marshall published his *Military Miscellany* which was the essence of all his endeavours, and which Lord Panmure said should be in every regimental medical officer's kitbag. It covered all the multifarious aspects of a soldier's life and how best to effect them; it soon became known as 'Marshall's *Miscellany*'. That famous, distinguished French physician, known to every paediatrician, Etienne-Louis Arthur Fallot, commented thus on the *Miscellany*:

'This is the work of a man possessing a complete command of his subject, having passed the greater part of his life studying the character and the particular habits and needs of soldiers among whom he lived, and devoting himself to their well-being. Having also better insight and an independent spirit, he was able to see faults wherever they were, and he had the courage to expose and draw attention to them. To those who suspect that this work is too serious or too dull, I should like to say that the many anecdotes and happy stories and occurrences with which the work abounds, will amuse and agreeably relax the intelligent reader.'

CONCLUSION

Henry Marshall, as assistant-surgeon in the 89th Foot Regiment in Cape Town, was the first man ever in the British army, or any army, to apply himself to the collection of vital statistics. He demonstrated their practical bearing on the prevention of ill health and mortality, unhappiness, and crime among serving soldiers, and thereby improved the efficiency of the fighting units. It all began as a simple statistical compilation of relevant facts which no-one had thought of before. His manner was quiet, unassertive and thoughtful; his facts real, and his purpose, the good of the soldier. These characteristics gained him friends in high places, who eventually persuaded the military authorities to accept his recommendations.

It is right that we should recognise the worth of our professional predecessors. The fact that Henry Marshall was not in the mainstream of medical advances, but in a tributary very peculiar to itself—a special department of medicine—is perhaps the reason for the lack of recognition of a man of such great worth and quality.

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