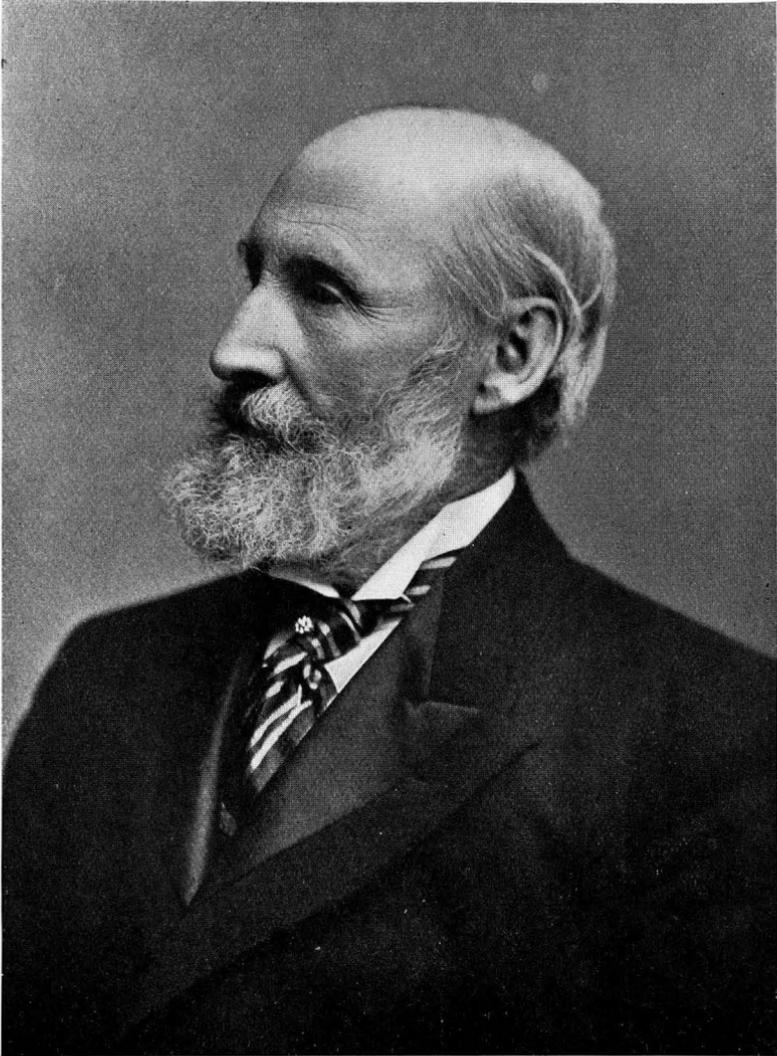


[To face p. 11.]



Yours very truly  
Edward Hull

## PROFESSOR EDWARD HULL, M.A., LL.D., F.R.S.

It was with deep regret that the Palestine Exploration Fund heard of the death, on the 18th of October last, of one of the oldest, if not the oldest, of its friends and supporters. The Fund has always been able to point with pride to the long list of soldiers, scholars, scientists, and members of the professions, who have actively contributed to its success and progress. There have always been, and it may confidently be hoped there always will be, men with special attainments ready and anxious to throw more light upon the "least of all lands," and, by a little here and a little there, to increase that more intelligent understanding of the past upon which the future of our own civilisation inevitably depends. Among such men we place Prof. Edward Hull, M.A., LL.D., F.R.S., Consulting Geologist, distinguished for a long, arduous, and honourable career in the field of geological research.

Born in 1829, Prof. Hull died at the advanced age of 88, retaining his mental powers to the end. In his time he served on the staff of the Geological Survey of the United Kingdom, as Director of the Geological Survey of Ireland, as Professor of Geology in the Royal College of Science, as member of the Royal Commission on Coal Reserves, as Secretary to the Victoria Institute, etc. Of his more recent scientific work the first place must be given to his investigations in connection with the bed of the Atlantic. He ascertained that "the Continental Platform," which extends along the whole of Western Europe, including the British Isles, is eroded by old riverbeds (*e.g.*, the Loire, the Tagus). These descend to depths of several thousand feet below the present surface, and find their counterparts in the submerged valley of the Congo off the coast of Africa, and other valleys found on the American side of the Atlantic and under the Arctic Ocean.

Of more specific interest to us is the work undertaken by Prof. Hull in surveying Arabia Petraea and Palestine. On the recommendation of his friend, our former Chairman, Sir Charles Wilson, he was appointed in 1883 to lead the expedition which the Committee of the Fund had formed in order to explore and carry

out a geological and geometrical survey. "Major Kitchener in company with Sergeant-Major Armstrong" were responsible for the geometrical work of the expedition, and from that time until Lord Kitchener's death the scientist and the great soldier were personal friends. In his *Reminiscences of a Strenuous Life*, written in 1910, Prof. Hull referred to him with prophetic instinct as one who "may still have an important future in the service of his country."

The expedition travelled from Cairo to the Gulf of Akabah, marched up by Petra to Beersheba, thence to Gaza, Jerusalem and Jaffa. The complete narrative is given in his work, *Mount Seir, Sinai, and Western Palestine* (1884), and in a special *Memoir of the Physical Geology and Geography of Arabia Petraea, Palestine, and adjoining districts* (1886). In the course of the expedition "he was enabled to trace the line of the great 'fault' or fracture of the strata, along which the formations are elevated several thousands of feet along the Arabah and the Dead Sea—on the east side—and which is the cause of the main physical features of the Jordan-Arabah depression. Another exceedingly interesting fact which Prof. Hull ascertained was that, although the level of the surface of the water of the Dead Sea is 1,200 feet below that of the Mediterranean, at a former geological period this surface had risen to nearly the same level as that of the Mediterranean, as proved by the occurrence of calcareous marls with lacustrine shells in the Arabah Valley at this level."

This expedition was the fountain-head of a number of articles and papers on Palestinian geology and other subjects. Of these several appeared in the pages of the *Q.S.* (1884-6, 1889-90, 1896, 1903); and as recently as last year there was a reprint of his recollections of Lord Kitchener ("Lord Kitchener and Palestine Exploration: A Geological Reconnaissance"), *Q.S.*, July, pp. 123 *sqq.* An *aperçu* based upon the above-mentioned *Memoir* was printed at Liège in 1894; and among his many contributions and papers read before the Victoria Institute are several of Palestinian interest. Here may be named: (1) "Notes on some of the Results arrived at by Members of the Expedition sent out by the Committee of the P.E.F. in 1883-84 to Arabia Petraea and Western Palestine"; (2) "Where is Mount Sinai?" (3) "Holy Scripture illustrated and confirmed by Recent Discoveries in Palestine and the East"; and (4) "A sketch of the Geological History of Egypt and the Nile Valley."

Among Prof. Hull's more recent work may be mentioned articles in Hastings' *Bible Dictionary*, and a small series which appeared in *The Outlook* during the autumn of 1913, on the Dead Sea, Petra and Mount Hor, the site of Mount Sinai, and the physical position of Egypt at the time of the Exodus.

Prof. Hull continued to take a deep interest in the P.E.F. up to the end, and he will be much missed by all who knew him.

S. A. C.

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## HYGIENE AND DISEASE IN PALESTINE IN MODERN AND IN BIBLICAL TIMES.

By Dr. E. W. G. MASTERMAN.

### INTRODUCTION.

THE subject of the diseases mentioned in the Bible has always been a difficult one and it is not expected that this present effort to elucidate it will have anything of finality about it. The writer will be content if he clears up some obscure points, and if incidentally he is able to present to his readers a considerable mass of facts which have not hitherto been co-ordinated. The basis of any correct views on the subject must be our knowledge of the conditions of life in Palestine in Old and New Testament times. Though doubtless much may be gathered from literature it is reasonable to suppose that the physical environment of the modern peoples of this land as regards climate, food, houses and mode of life being probably much the same as of old, a study of these will be likely to prove at least as important. Then the diseases rife in the land to-day may also be considered. It is quite possible that some diseases have changed their type or even become extinct, and it is certain that some diseases occur which were unknown before the Middle Ages, but as some popular information on the modern diseases of Palestine may be opportune at this time, this section will be complete in itself, though necessarily brief. Twenty years' residence in various parts of the Holy Land in actual medical practice enables the writer to treat this part of the subject with the authority of experience, and he does so with greater assurance, inasmuch as he has discussed various points here mentioned with other practitioners in the land, both personally and in conferences.

The literature of this subject was until recently extraordinarily scanty, but in the last few years a number of medical papers from those practising or making researches in the land have been published which do much to add to our knowledge. This is notably the case with regard to tropical