John Gray M'Kendrick, F.R.S.

PROFESSOR JOHN GRAY M'KENDRICK was born in Aberdeen in 1841, and at the date of his death-2nd January 1926-was the oldest physiologist in the United Kingdom, and probably in the world. His career was varied, for after graduating M.D., Aberdeen, in 1864, he at first took up junior medical and surgical appointments in England; then returned to Scotland as surgeon to the Belford Hospital at Fort William, and finally in 1870 definitely embraced physiology as a career, having been invited by Hughes Bennett, the predecessor of William Rutherford in the Chair of Physiology-or, as it was then termed, the Institutes of Medicine-to come to Edinburgh as his assistant. Soon after this, M'Kendrick established himself as a lecturer in physiology in the extra-mural Medical School with successful results, so that in 1876 he received the appointment of Professor of Physiology in the University of Glasgow in succession to Andrew Buchanan, whose name is best known in connexion with researches on the chemistry of blood-coagulation. But it was the experimental side of the science which appealed most strongly to M'Kendrick. He was expert in designing demonstrative experiments both for the purpose of instructing his class at the University, and also for the very different audience at the Royal Institution in London where he lectured for three years as Fullerian Professor. His teaching, set forth in simple straightforward language, was equally appreciated by both kinds of audience, and led to his being frequently invited to give public lectures on physiology both in Glasgow and elsewhere.

He occupied the Glasgow Chair until 1906, a period of thirty years. During his tenure the Medical School was rebuilt, including the part devoted to physiology, to the planning of which M'Kendrick gave a large amount of time and attention. His published researches were neither numerous nor of exceptional importance, but his work was thorough, and his experiments were characterised by ingenuity. His Life of Helmholtz (1909) is one of the best of the Masters of Medicine series. His Textbook of Physiology (1888) was a very useful addition to the library of the medical student of that time, who had very few textbooks to select from in contrast to the legion by which his choice is now embarrassed.

Of M'Kendrick's personal characteristics it is difficult to speak too highly. Kindly and true, he was beloved by all his friends, and I suppose he never had an enemy. He had a keen ear for music, and like Silas Wegg would even occasionally "drop into poetry," a practice which has not been unknown amongst other physiologists. interested in the theory of the phonograph and spent much time and trouble in attempts to improve the gramophone, without, I believe, any great success; but this was only an amusement of his retirement. Of late years his friends saw only too little of him, for Stonehaven, where he had built himself a house and took up his permanent abode, was not very accessible; most of his time here was spent in his garden, a love of which he shared with his friend Michael Foster and many other physiologists. He also interested himself in civic affairs, and was for several years Town Councillor and Provost of the Burgh, in the Town Hall of which is now deposited the portrait given him by his friends on his retirement from the Chair of Physiology. He married in 1867. His wife, to whom he was devotedly attached, died in 1898. They had two sons and two daughters. One of the sons is the Director of the Laboratory of the Royal College of Physicians, Edinburgh; the other an eminent Glasgow physician.

M'Kendrick was elected a Fellow of the Royal Society in 1884 and served on its Council in 1892–3. He became a Fellow of the Royal Society of Edinburgh in 1873, was frequently a member of the Council, and was also a Vice-President. He was awarded the Makdougall Brisbane Prize for the period 1894 to 1896 for his "physiological papers, especially in connection with sound, many of which have appeared in the Society's publications."

The following are some of his publications:

"On the Physiological Action of Light," Part I, Trans. Roy. Soc. Edin., xxvii, 1874. (With James Dewar.)

"On the Physiological Action of Light," Part II, Lond. Med. Rec., iii, 1875. (With James Dewar.)

Outlines of Physiology in its Relations to Man. Glasgow, 1878.

 $\it Textbook~of~Physiology~(including~Histology~by~P.$ Stöhr), 2 vols. Glasgow, 1888–89.

Hermann von Helmholtz. Masters of Medicine series, London, 1909.

"On the Respiratory Movements of Fishes," Journ. Anat. and Physiol., xiv, 1880.

"The Gases of the Blood in Relation to some of the Problems of Respiration," Brit. Med. Journ., ii, 1888.

"Chronological Tables of Scientific Men, showing the Names of the

more distinguished Anatomists and Physiologists, and their Contemporaries," Proc. Phil. Soc. Glasgow, 1890 (a very useful compilation).

The Physiology of the Senses. University Extension Manuals, London, 1893. (With W. Snodgrass.)

- "On the Tone and Curves of the Phonograph," Journ. Anat. and Physiol., xxix, 1895.
- "Observations on the Phonograph," Trans. Roy. Soc. Edin., xxxviii, 18 9.
- "Sound and Speech Waves as revealed by the Phonograph," *Proc. Phil. Soc. Glasgow*, 1896.
- "Notes on certain Physical and Physiological Measurements and Estimates," Journ. Anat. and Physiol., xxxi, 1897.
- "On the Action of Radium Bromide on the Electromotive Phenomena of the Eyeball of the Frog," *Proc. Roy. Soc. Edin.*, xxv, 1905. (With W. Colquhoun.)

E. S. S.