A. V. HILL, C.H., F.R.S. – AN APPRECIATION

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A. V. Hill

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To present an appreciation of A. V. Hill is to follow in the wake of a long and impressive list of others who have honoured this quite remarkable man. Certainly there has been variety. The earliest I found was associated with his period of work on "Muscular exercise, lactic acid and the supply and utilization of oxygen", 1923 (*Quart.J.Med.* 16, 135 and *Proc.Roy.Soc.B.*, 96, 438 etc.) and the publication of "Muscular movement in man" in 1927 (McGraw Hill). The book review was an appreciation of his lucid contribution and the inference was that this book initiates the academic study of active man. The repercussions of this work have been far beyond A. V. Hill's visions and even he had an enjoyable opportunity to admit this in September 1965 when he was shown both an ancient cycle ergometer and inertia dynamometer. This was on a visit one delightful afternoon to Ikai's department of physiology in the School of Physical Education in Tokyo University. Both pieces of equipment had been constructed by Katsuki, Ikai's predecessor, to repeat successfully experimental work described in the 1927 book. This laboratory in Tokyo is called 'The A. V. Hill Laboratory' and one of its proud possessions is his signature in their visitors book; one of my proudest moments was to sign the book next!

There are many other appreciations of A. V. Hill related more particularly to his work in other spheres of activity. For us contributing to a journal of sports medicine it may seem unfortunate that there is a less obvious connection with sports and the athlete. However, this may only be a case of awaiting the application to human movement of his other work in muscle metabolism. A considerable part of this was in parallel with his long friendship with Otto Meyerhoff and was highlighted by an article entitled "A challenge to biochemists" written in a volume dedicated to Meyerhoff's 65th birthday (1950 *Biochem.Biophysica Acta* 4, 4-11). The article was a tribute to Meyerhoff, and scientifically most provocative, it epitomized A. V. Hill's own approach to muscle physiology as a study firmly based on a knowledge of biology and biochemistry. When one considers his criteria and looks at the list of his students it is obvious that he passed on an impressively broad view of 'muscle' to his 'academic sons'. Most of the applied physiology we see in physical education and sport owes its origins to these 'sons'. The literature is studded with their names and they are distributed around the world.

However, A. V. Hill's personality was also felt in other ways less well related to the research laboratory and can be seen in the periodic International Congresses of Physiologists. While he is mentioned as an active participant at the Edinburgh meeting in 1923, he organized the arrangements for the European group to attend the Boston meeting in 1929. The trip was a remarkably successful enterprise which united some 400 people from 22 countries into close friendship and useful academic discussion. It is worth recording that the ship obeyed the prohibition laws of her American owners! (W. O. Fenn, Ed., *History of the International Congresses of Physiological Sciences 1889-1968*). But, without doubt I consider that the greatest declaration of admiration and esteem was at the Tokyo meeting in 1965 when he was given the "Keys of the City". Even if one can name the Governor of the world's largest conurbation as a past student it requires the complete respect and love of everyone to put such an event into effect.

In this issue we joyfully add our own tribute to A. V. Hill's continuing work, writing and teaching while celebrating his 90th birthday. Perhaps it is now left for us to imagine that he might put "A challenge to sports physiologists" which could be that the time has come, 50 years later, to write a companion volume to "Muscular movement in Man".