Heart and the British Heart Journal

The four decades from 1870 to 1910 were exciting times for cardiovascular physiology and medicine in Britain. In the physiological laboratory the properties of cardiac muscle were identified, atrial and ventricular fibrillation were delineated, haemodynamics were studied, and a physiologist, Augustus D Waller, recorded the first human electrocardiogram. These investigators had no problem with getting their work published in the Journal of Physiology or the Proceedings of the Royal Society of London. However, the same was not true of the clinicians. When, as a general practitioner, James Mackenzie started his work on the venous pulse in 1892 he was able to get it published only in the Journal of Pathology and Bacteriology, which was edited by a friend. Later he gained access to the British Medical Journal and other general medical journals including two in the United States. Similarly when Thomas Lewis wrote his first cardiac papers while he was a house physician he had to use non-specialist journals. Both of them published important work in the British Medical Journal, the Lancet, Practitioner, and Quarterly Journal of Medicine.

In 1908 Mackenzie moved to London where for the first time he met Lewis (fig 1), who was 28 years his junior, and as Lewis described it "he extended to me a friendship which soon became intimate and highly prized". Mackenzie's quest for the cause of complete irregularity of the heart fascinated Lewis and 'his own meteoric career in elucidating the mechanism of cardiac arrhythmias. From their own work and that of others, including the basic scientists, it was now obvious that a journal was needed exclusively for cardiovascular papers. In the summer of 1908 it was Lewis who took the first step by suggesting to Mackenzie that such a journal should be founded. (Wellcome Institute, Contemporary Medical Archives Centre, PP/LEW E2/2).

The next and crucial step was taken by Mackenzie who found a publisher in January 1909. This was Shaw and Sons of Fetter Lane, London, an old established firm dealing chiefly with legal books. This was an unusual venture for them and at a guess it may have been arranged by Mackenzie's brother William, a distinguished lawyer who became the first Lord Amulree. In March, Mackenzie invited Lewis to be its editor. Perhaps the title Heart was suggested by that of Brain, the second oldest clinical specialty journal in Britain, founded in 1879. Lewis was now aged 26 and had no editorial experience, but his capacity for intense concentration and prolonged hard work ensured that progress was swift. Invitations to distinguished collaborators went out in April, and final arrangements with the publishers were made in May. Lewis said that, "One of the chief reasons for accelerating publication was that several articles were ready". (Wellcome Institute, ibid). The four papers of Part 1 of Volume 1 went to press on June 9 and the first issue came out on July 1 1909. The title page (fig 2) described Heart as "A journal for the study of the circulation. Edited by Thomas Lewis, M.D., aided in the selection of papers by Dr. W. H. Gaskell, Prof. A. R. Cushny, Dr. Leonard Hill, Dr. J. Mackenzie, Prof. A. W. Hewlett (Ann Arbor) and Prof. G. N. Stewart (Cleveland)." There were 44 collaborators of whom 21 were from the United States, one from Canada and one only, Professor Willem Einthoven, from Europe. The Prefatory Note was written by Walter H. Gaskell, FRS, the Cambridge physiologist whose work on the rhythmical contraction of cardiac muscle was much admired by Lewis. In it Gaskell said that medicine was now losing its empiric character and was founding itself more and more on facts derived from the experimental sciences of physiology, pathology, and pharmacology. He pointed out that the results of animal experiments were being applied to man, and that laboratory methods were being used for diagnosis. It was "of vital importance for the medical man to keep in touch with the workers in the laboratories, and to apply the most recent knowledge gained by them directly to man". The journal, he said, would be of great value to the clinician because it would focus together work in the laboratory and in the hospital, and also to the physiologist who would be reminded of "the nature of the problems which, in the opinion of the
medical man, are pressing urgently for solution”. Lewis’s preface was a notably mature and authoritative statement from the young editor.

Editorial Preface

It has been decided that it is now essential that those specially seeking new facts and new conclusions relating to haemodynamic problems should reap the advantages of a special Journal, in which such facts and the conclusions drawn from them may be placed on record.

This resolve comes from the conviction that students of the circulation are now seriously hampered in their work by the difficulty of keeping in touch with the papers that appear, so widely scattered, in the various publications of more general scope.

The Journal affirms a single object, the progress of knowledge of the mechanism by which the blood circulates in health and disease. A closer union of thought amongst workers in the separate branches of medical science must contribute to the attainment of this end.

To know the pump, which Harvey revealed to us, more intimately; to understand more definitely the forces which regulate its action, and the mechanism by which it distributes the constant stream of blood, bathing and feeding the tissues of the body; to determine the causes which impair the circulatory functions; to see more clearly the means of prevention and the remedies which palliate where injury to the heart or vessels is concerned; such is the scope of this Journal. The field is sufficient for many workers. The Journal requires communications, containing, above all, original and carefully ascertained facts, and conclusions consonant with such facts and previous observations. By the record of fact and the statement of new principles progress will be ensured.

The advances of recent years are largely indebted to Gaskell and his work for their initiation, and this Journal heartily appreciates the message he sends it as it takes the first step on its course.

Lewis’s own paper in the first number was on paroxysmal tachycardia, Mackenzie’s was on nodal bradycardia, while Arthur Cushing wrote on aconitine arrhythmias and Leonard Hill on measurement of systolic blood pressure. It was a good start to what became under Lewis’s critical editing one of the finest medical journals of the century. Although Lewis often asked others for their opinion on submitted papers he always read and judged every one himself, insisting on original observation and experiment and a high standard of expression and thought. Speaking of his work as editor, Drury and Grant said, “Few papers accepted for publication appeared in the form in which they were submitted; most were returned to their authors at least once for revision with many pencilled alterations, both large and small. Many authors underwent the ordeal of a long interview with the Editor, during which the deficiencies were made plain to them and amended”. The great pains he took with editing is well shown in a letter in 1927 (Wellcome CMAp PP/LEW E1/8) to Carl J Wiggers who had sent an article on aortic stenosis by his young associate Louis N Katz, later a famous electrocardiographer. Lewis took four pages to explain its inadequacies and ended with a typically abrasive comment, “Until Katz has mastered the art of writing he should publish in American journals where there will be closer contact between the author and the editor”. Lewis’s own papers were often of considerable length, averaging 30 pages—about 9000 words—with a range of six to 76 pages. Eventually he recognised that any paper had to be shorter, “workers have really no time to plough through it”. The full run of Heart which comprised 16 volumes, each containing four issues, was spread over 24 years from 1909 to 1933. The number of pages per volume ranged from 273 to 405 with an average of 347 pages. Lewis never accepted the need to publish at regular intervals and the individual issues came out when there was enough material to fill them. Sometimes the issues were only one or two months apart. By 1924 there were 400 subscribers and each volume cost thirty eight shillings and sixpence (about £110 by 1995 prices). Lewis thought the price was too high and asked Mackenzie’s help to find someone who would give £500 to endow the journal. “It would be a great thing if we could reduce the cost to a really reasonable figure”. But nothing came of this. The publisher made only a small profit from the journal and the managing director Mr Henry Morten Bond pursued the venture because he admired Lewis as a man and was impressed by his work. Altogether 326 papers were published in Heart and nearly half came from Lewis’s department. Of the remainder about one quarter each were from the United States and elsewhere in Britain. Workers in Europe contributed just 10 papers; they had their own good journals. But only one of these journals was cardiac and this was Archives des Maladies du Coeur et des Vaisseaux, which started two years before Heart. It would therefore be correct to say that Heart was essentially an Anglo-American journal and in the first 17 years the United States was an important source of material. However, in 1926 the American Heart Journal was founded and after that only six American papers came to Heart in its last seven years.

1926 was also the year when Lewis’s long period of work in electrocardiography came to an end and was replaced by a study of the peripheral circulation, although others in his department continued with some cardiac work. He then founded and began to promote with great
The society and the activity of many of its members render such a decision not only wise but inevitable.

There is no stronger tradition, concerning work upon the heart, than the British. Traced from the incomparable Harvey in the early part of the seventeenth century, through Richard Lower and Stephen Hales, and the great clinicians of the eighteenth and nineteenth centuries, Heberden, Parry, Withering, Corrigan, Hope, Stokes, Peacock, Ringer, Mackenzie, and by the great physiologists, Gaskell and Starling. All these names from the distant and recent past are linked with outstanding contributions to our knowledge of the heart and its maladies; their work forms a legacy of great achievement. The members of the Cardiac Society of Great Britain and Ireland are the chief trustees of this legacy, and its weighty responsibility.

The success of the new journal will depend upon the quality and not primarily upon the quantity of the matter which it publishes. Originality of observation and of view will be the touchstone of quality. The work of editing is uncreative: an editor can publish only what is offered; he will use most of what is offered. The journal's success is governed, therefore, from the source of the material. The best contributors will submit for publication only sound and original matter and thought. They will edit their own work; will judge their own text impartially and will prune it ruthlessly, thinking of the standard of work accomplished and to be reported and not of personal interest; they will prepare their manuscript in all particulars to save further labour; they will facilitate the reading by every device of conciseness, of simplicity, of clarity, and of accuracy, in composing text, figure explanation, and reference; for every hour so spent by one who writes will save countless hours by the many who afterwards read. They will remember that the work of editing is a gratuitous and unenviable task, and they will bow loyally to editorial decision.

To express the hope that the new journal will come to possess many contributions of this kind is to give the fullest wishes for the journal's real and lasting success.

There can hardly be an editor of any journal in the world who would not say Amen! to Lewis's message. Certainly the re-born Heart will be glad to adopt and adhere to the precepts of its great first editor.

Finally it must be mentioned that the title British Heart Journal was arrived at only after much discussion in the new society, which would have liked to have called it Heart, but was denied the title by the publisher. It is now very appropriate to see the letter which Campbell sent to Shaw and Sons in 1938 (Welchome CMAC PP/LEW A1/110), part of which reads as follows.

"Perhaps some years in the future if it is still felt that "Heart" would have been a more suitable title I may approach you again to see if you feel after the lapse of some years that the objections have ceased to be valid. The last is merely an expression of my personal opinion and not the views of the Society"

Now, 58 years later, it may be said that the foresight of Maurice Campbell has come to fruition and that his mantle has fallen upon the shoulders of Professor Michael Davies who no doubt will wear it with pride in remembrance of the vision of his distinguished predecessor in the editorial chair.

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