## JOURNAL OF MENTAL SCIENCE, JULY, 1930.



WILLIAM BEVAN-LEWIS, M.Sc., M.R.C.S., L.R.C.P.

Born May 21, 1847. Died October 14, 1929. Ordinary Member, 1879. President, 1909–10. Honorary Member, 1918.

NEM LORK CITY CORNELL UNIVERSITY

## THE

## JOURNAL OF MENTAL SCIENCE

[Published by Authority of the Royal Medico-Psychological Association.]

NOV 1 8 1930

No. 314 [NEW SERIES]

JULY, 1930.

Vol. LXXVI.

## WILLIAM BEVAN-LEWIS, M.Sc., M.R.C.S., L.R.C.P.

Following the death of Sir David Ferrier in 1928 has occurred that of Dr. W. Bevan-Lewis, and thus have passed away in rapid sequence the two great neurologists who gave the Wakefield Mental Hospital an international reputation during the last quarter of the nineteenth century.

The earlier contributions of Ferrier were experimental while all those of Bevan-Lewis were histological, and for many years the former overshadowed the latter as regards public recognition. It is nevertheless true that these two workers were equally instrumental by their separate methods of approach in laying the foundations of our knowledge of cortical localization, and that the histological descriptions of Bevan-Lewis, both in precision and general accuracy of detail, are as true to-day as when published over forty years ago.

Bevan-Lewis, the son of William T. Lewis, of Cardigan, was born on May 21, 1847, and died on October 14, 1929, in his 83rd year, nineteen years after his retirement from the active practice of his profession.

It would be presumptuous for one who knew so little of Bevan-Lewis personally to attempt a description of his life and work at Wakefield in view of the existence of such a first-hand appreciation as that of Sir James Crichton-Browne, which was published in the *British Medical Fournal* of November 2, 1929, and, I therefore, have taken the liberty of re-inserting it here:

LXXVI. 27

"With Dr. William Bevan-Lewis has passed away one of the most diligent and productive of labourers in the field of medical psychology in this country during the last quarter of the last century and the first decade of that through which we are hurrying along. With few outside interests he was wedded to medical psychology, regarded it with an affection only second to that which he bestowed on his ever-helpful wife, and notably contributed to its advancement, on both its practical and scientific sides.

"After completing his studies at Guy's Hospital and qualifying, Bevan-Lewis, then 21 years old, became Assistant Medical Officer at the Buckingham County Asylum, but after being there for two years, and having married, yielding to the wish of his family, commenced private practice in Cardigan, his native town. But he had been strongly attracted to the study of mental disease, and the call of the laboratory was upon him. He soon found that his occupation in a mountainous district of Wales was uncongenial, and left him no opportunity for the research work in which he earnestly desired to engage. He sought, therefore, to re-enter the asylum service, but at that time there was not an asylum in England that provided accommodation for a married assistant medical officer, and so, after several attempts, he failed to get his foot on that ladder. Ultimately, as a forlorn hope, he applied to me. I was on the look-out for talent, and happily discerned his zeal and ability. I succeeded in making the necessary arrangements, so that he and his wife took up their abode at the West Riding Asylum in the beginning of 1875. He came there as a clinical assistant without pay, though board and lodging were provided, but promotion was rapid at the West Riding Asylum in those days, and within a few months he was appointed medical assistant and pathologist. In that capacity he continued to act under my medical directorship until I became a Chancery Visitor in April, 1876. My official relations with him were of the happiest description, and ripened into warm friendship, which continued unchilled until his death.

"During the eight years after I left Wakefield I was in constant communication with Bevan-Lewis, and knew what excellent work he was doing in the research laboratory and as deputy medical director, which he had become; but I confess that when he was appointed to the chief charge in succession to Dr. Herbert Major, in 1884, I had doubts whether, with all his ability, the somewhat delicate, studious and retiring subaltern, with keen Cymric sensibility, would be equal to the administrative control of a great mental hospital with 1,600 beds, gradually expanding, and with a certain reputation to maintain. His predecessor had found the burden too oppressive. But 'as thy days, so shall thy strength be,' and my doubts were speedily dissipated. From the first Bevan-Lewis, by his rectitude, assiduity and modest self-possession secured the confidence of his staff and his committee, and for twenty-six years he remained the trusted and esteemed head of the asylum, and the beloved physician at the bedside.

"Not only did Bevan-Lewis maintain unsullied the best traditions of the West Riding Asylum, but he extended its usefulness and

introduced some new developments. He created a dispensary or out-patient department, the first experiment of the kind attempted in an asylum in this country; he made special provision for the education and training of the weak-minded; he established a reception block, furnished with all the most modern apparatus for clinical observation and research; and he constituted the asylum in some measure a post-graduate school, for he opened it for short periods of residence to young medical men anxious to obtain some special knowledge of mental and nervous disease. Many who availed themselves of the privilege thus offered, and who have since attained professional distinction, together with many of the students who attended his class at the Leeds School of Medicine, afterwards the University of Leeds, will bear testimony to the stimulating nature of his teaching, and to the charm and encouragement of his personal influence.

"Of Bevan-Lewis's manifold scientific labours and achievements it is impossible to give here anything but the barest outline. His first contribution to medico-psychological literature was a paper published in the West Riding Asylum Medical Reports for 1875 on The Histology of the Sciatic Nerve in General Paralysis'; in this he described degenerative changes in the peripheral nerves in the advanced stages of that disease, and correlated these with the spinal changes in locomotor ataxia. This was followed in the Reports of 1876 by a careful calorimetric study of 'The Influence of Various Alkaloids on the Generation of Animal Heat.' In the Proceedings of the Royal Society for 1878 there appeared a paper on 'The Lamination of the Motor Area of the Brain,' and in Brain of the same year there was a paper on 'The Comparative Structure of the Cerebral Cortex,' which was the starting-point of those discoveries in histological localization of the cerebral cortex by which he will be best remembered. While on the editorial staff of Brain I received from Bevan Lewis invaluable assistance, and it was in its pages that appeared the series of articles on 'The Methods of Preparing, Demonstrating and Examining Cerebral Structure in Health and Disease,' which were afterwards collected in book form with the title of The Human Brain: Histological and Coarse Methods of Research, and published in 1882.

"It was in 1889 that Bevan-Lewis issued his magnum opus his Text-book of Mental Diseases—the product of years of elaborate investigation, a book now forty years old, but one that still in many respects holds its own, and has not been altogether squeezed out by the multitude of text-books that have since emerged, especially in the United States. The book is much more than a text-book, being really a compendious system of psychological medicine. It embodies all the author's histological observations, with admirable illustrations; it supplies life-like studies of the symptoms of the various forms of mental disease-studies that could not be bettered to-day. There have, of course, been great advances in ætiology and treatment since the text-book was written, but in its clinical and pathological sections it is still abreast of our knowledge or to-day. Enormous pains were expended on its preparation, and it is singularly lucid in style. In later years Bevan-Lewis continued to contribute to *Brain* and the *Journal of Mental Science* thoughtful essays on alcoholism, crime and insanity; on the neuron theory; and on rest and sleep.

"Bevan-Lewis received the honorary M.Sc. degree of the University of Leeds in 1905, and was President of the Medico-Psychological Association in the year 1909–10. The value of his work has been fully appreciated by his own specialty at home and abroad, and has been widely recognized by the profession at large. That it did not receive the higher acknowledgment it deserved was no fault of mine or of Sir David Ferrier. One of the gentlest and most unobtrusive of men in an age when notoriety is the universal quest, Bevan-Lewis persistently kept himself in the background."

Before referring specifically to some of the chief researches of Bevan-Lewis, I should like to insert here certain obituary remarks I contributed to the *Lancet* shortly after his death. I give these as they stand, for as a rule such descriptions are spoiled by re-writing:

"I feel doubtfully qualified to write even a brief psychological sketch of the great neurologist whom I succeeded at Wakefield Mental Hospital nineteen years ago, for I saw Bevan-Lewis on the day of my election and on no other occasion. I remember vividly my interview with him in his drawing-room, now a dormitory of the institution. He was not in the least the man I had often pictured to myself during the twenty years I had been familiar with his work and reputation, and whose beautiful drawings of the cortex cerebri had first attracted my attention to neurology. He was quiet, dignified and reserved, and though perfectly courteous, neither volunteered nor provided any information of value regarding the Institution and my new duties. I could fully appreciate his point of view. I was a stranger about to undertake the work he was laying down and of which he was jealously proud; and his main object was to obtain the best terms possible for the staff he was leaving behind him. I parted from him with regret, feeling certain that I should never see him again. I wrote later asking if I could come over before he left Wakefield, but he replied that it was not necessary and that I should find everything in perfect order. A lengthy residence in Wakefield has satisfied me of the truth of this description of a mere interview as a picture of the mentality of Bevan-Lewis. He was an enthusiast, and a recluse with few interests beyond his scientific investigations. He was retiring and aloof, and rarely to be seen or interviewed, but this very attitude towards others, which might have led lesser men to be ignored, in the case of Bevan-Lewis was a powerful factor in the success of his administration. For he was successful, and during his twenty-six years as Medical Director he saw, and took a prominent part in, administrative changes and extensions which taken alone would have gained him a high reputation. He witnessed the opening of Menston and Storthes Hall Mental Hospitals, and the planning, building and early years of working of a new mental hospital attached to the Wakefield Asylum of old. He held views on mental hospital evolution which were almost prophetic. As early as 1889 he founded at Wakefield an out-patient department which is still flourishing, and during many years, until in fact the opening of Scalebor Park Mental Hospital rendered the step unnecessary, he provided private mental nurses for the district. Referring in 1889 to the proposal, under the auspices of the London County Council, to erect an acute hospital, providing accommodation for 100 patients, to appoint a staff of experienced visiting physicians, and to establish in connection therewith a school for the scientific study of mental disease, he remarked:

"It must be admitted that the tendency to the establishment of the hospital system is the correct one, and that this end will be eventually realized. Within the metropolitan area the conditions are so peculiarly favourable to its development that one is surprised at the limited accommodation proposed by its advocates: but as applicable to the provinces, the difficulties of applying the system are obvious, and a modified procedure is necessarily demanded. That the large county asylums should eventually become receptacles for the hopelessly incurable chronic class, officered and managed upon a far more economical system than the present; that special hospitals for dealing with the acute insane, with a well-trained staff of experienced alienists, and affording facilities for the development of clinical teaching should be instituted; and that they should contain centres for scientific investigation and research, are facts so self-evident as to require no further emphasis here.'

"These views found expression in Bevan-Lewis's administration during the next twenty years. He left the Chronic Block as he found it, an antiquated building surrounded by high walls, and it is doubtful whether he even noticed its sanitary defects, so endeared to him was every brick of Wakefield. In 1900, however, he witnessed the opening of the Acute Hospital, a modern building replete with what were at that time unique means for research and methods of scientific treatment. This hospital contained a large lecture hall and library and several laboratories, and it possessed extensive provision for electro- and hydro-therapeutic methods of treatment. I believe that to a great extent the new hospital realized Bevan-Lewis's ideal, although its completion came too late to enable him with his enfeebled health adequately to administer it. Bevan-Lewis lived and worked in a world apart, and if he felt and resented the belated recognition accorded to his work on cortical localization no one knew it."

I shall conclude this inadequate appreciation of a great man by referring to two aspects of his histological work.

In the first place I would draw attention to the painstaking

character of his methods, as exemplified by his detailed and precise descriptions of histological appearances and by his numerous and most beautiful drawings which profusely illustrated his Text-book of Mental Diseases, and also constituted striking illustrations in the text-books of the time. The other aspect of Bevan-Lewis's histological work to which I would draw attention is that for which his name will ever find an honoured place in neurological literature, I allude to his researches on cortical localization. How such detailed, clearly illustrated and convincing work could be ignored can only be explained by our common experience that research workers, like others, usually read only matters which interest them, and that during the period under review Bevan-Lewis stood almost alone as the representative of his special subject.

I will conclude by giving a paragraph in which, in 1909, I summarized the way recognition finally came to the work of Bevan-Lewis:

"The first important paper on cortical localization was that of Bevan-Lewis and Henry Clarke, published in 1878, on the cortical localization of the motor area of the brain. This communication, which localized the motor area in front of the furrow of Rolando, attracted little attention owing to the fact that the conclusions contained in it were opposed to the results of the numerous physiological experiments which, during the last two decades of the nineteenth century, largely monopolized the field of inquiry into the functions of the cerebrum. The observations of Lewis and Clarke have, however, at last obtained complete if belated recognition in consequence of the experimental work of Sherrington and Grünbaum, recently confirmed by Oscar Vogt, and the histological researches of Campbell and of Brodman. It is an interesting and in many respects a fortunate fact that the experimental method, which was responsible for the non-recognition of an important contribution to our knowledge, was also the method which first supplied evidence of its truth." JOSEPH SHAW BOLTON.