Obituary Notice

Arndell Neil Lewis, M.C., LL.D.

(Nov. 23rd, 1897-Dec. 27th, 1943)

At the time of the Centenary meeting of the Royal Society of Tasmania, although it was noted that Dr. Lewis was not present; his absence was not known to be due to a grave breakdown in his health, army service being assumed to be the cause. At the November meeting, when the question arose as to what were to be the functions of the Society in the future, he spoke and made a number of valuable suggestions, yet it was to be his last public act, as a rapid detoriation of his health set in, and his death occurred two days after Xmas.

Arndell Neil Lewis was a Tasmania of the fourth generation on both sides of the family, Richard Lewis having arrived in the Colony as early as 1812 and his mother's ancestor, the Rev. John Yule (a member of the pioneer group of missionaries to Tahiti), in 1813, when he was appointed as first Anglican Chaplain to the growing settlement at Port Dalyrmple.

Elder son of Sir Elliot Lewis and born on Nov. 23, 1897, A. N. Lewis was reared in an environment that brought him as a child into contact with leading figures of our political and social life. Outstanding among them was R. M. Johnston, Geologist and Government Statistician, who in walks and expeditions gradually inspired in him his own love of geology. He was fortunate, too, that his education at Clemes College was largely from Mr. W. H. Clemes, who was his mentor and life-long friend. It has been said that Lewis who was never attracted to sport, quite early made the request that, instead of having to do his share in them, he be allowed to follow up this science. Be that as it may, when he was about fifteen he brought to an exhibition of school work a remarkable collection of minerals and fossils, classified and described by himself, indicating already his originality of thought and deep interest in natural science. Guided by Mr. Clemes he took geology as part of his leaving examination. The outbreak of the 1914-18 war found him, although only sixteen years of age, with a commission in the Senior Cadets, then an integral part of Commonwealth military training. Until of military age he served in Tasmania and Victoria, and eventually joined the A.I.F. and served in the 1st Fld. Art. Bgde, the arm of his choice. The Armistice found him not yet nineteen years of age with a year's service in France and the M.C. for gallant work as a F.O.O. with an associated American division on the Hindenburg Line.

Following his return to Tasmania there followed a remarkable twenty-five years of devoted work for his community as lawyer, soldier, and scientist. It was

only fitting that he should follow his father's profession of the Law, to which he was admitted as a solicitor to the Supreme Court on 21st July, 1922. He joined the family firm of Lewis, Hudspeth, Perkins, and Dear, of which he was, at his death, the senior member. Graduation as LL.B. in the same year at the University of Tasmania was followed by the higher degree of LL.M. in 1925 and the LL.D. in 1930. At a special convocation in the following year his Doctorate was conferred by his father as Chancellor of the University.

During these years A. N. Lewis published a text-book of Australian Bankruptcy Law, now in its third edition, and used at more than one University. This was followed by a similar work on Australian Military Law, which was in the first place presented as a thesis when he was granted his Doctorate. He edited, too, the Tasmanian section of the Law Reports of Australia, a work that drew sadly on his limited spare time.

It is well known that political life offers perhaps the only road to high legal office, and, again, there was the tradition, both of his grandfather's long thirty years' service in the House, with periods of Ministerial office, and more recently his father's long and honourable career as Premier and Lt.-Governor of the State.

The times, alas, were very different from those in which his forebears took so distinguished a part. For the reverence and, indeed, hero-worship which was the reward of those who undertook public life in those decades, there was now apathy and indifference. Sincere and earnest and always handicapped by his own reticence and modesty he had most difficult elections to fight before his return in 1937. As a Member he was an outstanding figure, and one of the leaders of his party. His last political act was typical, when he resigned his seat feeling he could not carry out his military duties and properly serve his electorate at one and the same time.

As a Trustee of the Tasmanian Museum and a member of the Council of the Royal Society of Tasmania he was prominent from 1925. For the Museum he worked most generously as Chairman of Trustees and in organizing the casing and display of the Petterd and general geological specimens. This latter work took an immense amount of his time and was still unfinished when the outbreak of this war caused him to relinquish it. He was unstinting in the help he gave all aspects of the development of the Institution. On the Council of the Royal Society he was a delightful colleague, wise and generous in thought and action and, as always, a tireless worker. In committee, when such matters as a redrafting of the Society's rules was under consideration, we all turned to him. It was his wise counsel that helped most in the desperate years of the depression when he suggested, *inter alia*, the formation of the reserve fund that has since been so helpful. Above all, he was always to be relied upon with a sustained output of original work contributed by lecture and, when feasible, in full detail as a paper to the Proceedings.

Military service disputed with Geology for what spare time he might have, and in both he delighted. It was again a family tradition to serve in the Artillery, his grandfather and father both having done so, and his uncle Lt.-Col. R. C. Lewis, D.S.O., as commanding officer of the Garrison Artillery. Between the wars he was posted to the 6th A. Fld. Art. Bgde. as Lt.-Col. commanding, 1933-1938. An ideal soldier, he was untiring in his efforts to guide and lead, and most qualified to do so with his practical experience of the essential duties of all ranks. The secret of his success was his affection for the men and his ready accessibility. Able to sleep and live happily under conditions of much discomfort, it was his way to be first out in the morning and still at work long after the rest were asleep at night. By wise leadership he was largely instrumental in the Brigade winning the Mt. Shanck Trophy from all Australia and for years for them to be always one of the

hardest to eliminate in the finals of the competition. He was at his happiest and best on the long three-day treks between Hobart and Ross with his Battery, riding at ease, smoking and yarning he was a fund of information on everything we happened to pass, be it a homestead, trees, animals, anything—he had an anecdote to tell or some information to give as we went along. Most important of all, through these years he was training and preparing a succession of young officers for what lay ahead, and eventually in 1938 he was able to hand over a first-class command to his successor.

For some years there had been disquiet as to his health and on the outbreak of war his services were not accepted for this reason, so for a time he had to content himself with the responsible position as Director of Manpower for the State. To his delight, at a later period, he was given a post of great responsibility in the defence of the Island. To the carrying out of this trust he was unsparing of his bodily strength, and it was only realised late last year that his health had completely broken down, so he came back to civil life for the few months he had to live.

Dr. D. Thomas, Tasmanian Government Geologist, has undertaken to write of the scope and significance of the work done by Lewis in Geology, my own association with what must be looked on as his greatest achievement, is personal rather than scientific. In 1919 he resumed the field work commenced as a schoolboy with the Field Naturalists' Club. His companions were L. H. and A. V. Giblin, W. H. Clemes, C. E. Lord, and M. S. R. Sharland, and with them he ranged widely, especially towards the almost unexplored country of the S.W. Here his splendid physique and endurance were fully called upon as all supplies had to be carried by pack. Finding the existing maps to be quite inadequate he determined, in part at least, to remedy the deficiency. With John Murray he produced a scale map of the country from the Estuary of the Derwent to above Bridgewater with a considerable depth on each side of the river and, incidentally, this map has been of inestimable value to the Military Authority. For the last ten years, in conjunction with all his other works, he set himself the task of filling in the geological outlines of the country included in this map, which gradually was filled in and completion was within sight when war broke out.

His intellect matched his body, slow in making a decision, he reasoned clearly and deeply and was a most original thinker. As a teacher he expressed himself with great clarity and was at his best with young eager schoolboys who would follow his every word and action as he pointed out geological features encountered on an expedition. It was little wonder, as he gave them the same grave courtesy as he extended to the many distinguished scientific men whom he entertained in his home and took afield with him. He had, too, always a very boyish outlook, which they understood and reciprocated. Best of all he was utterly honest in all his intellectual and personal relationships. His family life was ideally happy, with his wife in all ways the good companion, with him when possible in the field, and always at hand with encouragement in his heavy commitments. Perhaps his whole character was best assumed up, when Sir Elliot Lewis on the occasion of his son's marriage some sixteen years ago likened him to Chaucer's Parfait gentil Knight. It is as such that we who knew and worked with him will remember him.

W. L. CROWTHER.

Arndell Neil Lewis, M.C., LL.D.

The Geological Work of Dr. A. N. Lewis

Through the untimely death of Dr. A. N. Lewis, Tasmanian geology has lost one of its most distinguished and devoted exponents.

His earliest contributions to the Royal Society of Tasmania were on Glaciology, and his interest in this subject never diminished. His progress in this study can be followed in his papers on the Glacial Remains in the National Park, the topography of Lake Fenton and district, the geology of Mt. Anne and Weld River Valley, La Perouse Range, the origin of the Great Lakes, on varved shales in Tasmania, Pleistocene glaciation from Mt. Field to Strahan, the correlation of Pleistocene glaciation, to mention but the most important. It needed strenuous physical exertion to secure his evidence in the forbidding mountains of Tasmania and his work was a test of endurance as well as a demonstration of insight and sound deduction.

His work stimulated that pioneering zeal that carried him over the greater part of the Island, but in no instance was there any narrow specialization. His work on glaciation was not confined to the mere recording of local details, as the wider aspects were built up on carefully compiled data, which inspired his work on the correlation of the Tasmanian Pleistocene glacial epochs and deposits with a later and even more intriguing paper on the correlation of the Pleistocene raised beaches and river terraces in unglaciated areas.

He was thus the foremost authority on Tasmanian glaciology and as such he was asked to contribute a chapter on this to Professor Sir Edgeworth David's monumental work of *The Geology of Australia.*

Among his unpublished manuscripts is a general account of Tasmanian Glaciation which ably summarises his views. Moments of illuminating discovery are unfortunately too rare in the experience of most of us, but they reached him when he first discerned the evidence of successive glaciations in Tasmania. This he described as follows:—

'In 1922 (December) I was descending the slopes of Mt. Anne, and, looking over the Huon Valley—whether the evening light or the peculiar configuration of the Frankland Range emphasised the fact I know not—but I was struck with the absolute clearness, on the panorama there unfolded, of the evidence of two distinct and superimposed glaciations, the one responsible for the topography of the Huon Plains, the other disclosed in the tributary valleys leading down from the encircling ranges. The fact of a smaller series of valley glaciers, terminating in piedmont moraines each resting on the older glaciated surface of the wide Huon Valley, was too apparent to be missed. With this clear disclosure in the field, I found the key to the task of reconstructing the history of the Pleistocene glaciation in this Island'.

In his numerous traverses through Tasmania he became interested in the many problems associated with the physiography of the areas and of the origin of the present surface features. His views on the physiography were summarised in his note on the Isostatic Background of Tasmanian Physiography, and also in the Handbook to Tasmanian Geology written for the Hobart Meeting of the Australasian Association for the Advancement of Science—a work in which he was joint author.

A search for the base of Permo-Carboniferous rocks in Tasmania, although unsuccessful, made him examine in great detail the areas in which these rocks outcrop. His interest in these systems is shown by the fact that his first published

work was on these rocks, and this was followed by his Notes on a cliff section near Cape Paul Lamanon, where he described the presence of limestone boulders containing characteristic fossils of this age in conglomerates that had been taken to be the base of this series. He described the Catamaran Coal Field and later recorded the presence of Glossopteris from Cygnet. Most of his published work contains reference to this group of rocks and it was this search for the base of the series which led him to investigate the Tyenna Valley where he studied in detail the older Palaeozoic Rocks. He discovered fossils in these older rocks, had them identified and thereby established beyond doubt the Ordovician age of the Junee Series (and the Caroline Creek Beds) which he instituted to embrace some of these rocks. With his characteristic insight he pointed out that the Junee Series rested unconformably on the Dundas Series which thus must be of Cambrian age. Since then, the age of the Dundas Series has been established as Cambrian, thus substantiating his views that the conglomerates at the base of the Junee Series were not West Coast Range conglomerates.

He was the first worker to recognize that volcanic activity was present in Triassic rocks.

Never did he forget the major aspects of geology, as is shown by his paper on the Pulsating World or the Influence of Earth Movements on Human Development, which he delivered when he was presented with the Medal of the Royal Society of Tasmania as a recognition of his geological researches.

He was called on by outside workers for advice and information on Tasmanian geology, and constant reference to his name shows how lavishly and freely this was given. He was a member of geological committees of the Australian and New Zealand Association for the Advancement of Science, and reported on a wide variety of subjects ranging from glaciation, Cainozoic and Quaternary climates, and on structural and land forms.

His published work represents but a fraction of his researches, much of which will now remain unfinished. His manuscripts on the glaciation of Tasmania have already been mentioned, but probably his greatest work—the Geology of Hobart—represents years of detailed application and painstaking research. The work is in great detail and is illustrated by a map showing the same high standard. There are several other papers and essays as well as a series of books on geological subjects which he had commenced to write.

The list of workers in Tasmanian geology is too short to be viewed with complacency, but it is illuminated with names that will long shine where that science is held in honour and Dr. A. N. Lewis by his work has proved himself one of the greatest in a great company.

D. E. THOMAS.

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