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ON March 26, 1927, Professor A. A. Lawson died, aged 53. He was taken suddenly ill on March 25; a serious operation was considered necessary, from the effects of which he never rallied, and he died the following day. It was only on November 6, 1926, that the new Botanical Department in Sydney University, designed after his own specifications, had been formally opened. An account of the ceremony, with illustrations, was published in *Nature* (April 2, 1927, p. 509), thus appearing within a week after his sudden and premature death. This inaugural ceremony had set the seal of success upon Lawson's tenure of the Chair in Sydney. He had brought a wide scientific experience to bear upon its plans, but also his peculiar artistic sense was reflected in its details.

Not only did death cut him off from the use of the building which his energy had brought into being, but the event fell between the date of the annual selection of fifteen candidates recommended by Council for election to Fellowship of the Royal Society and the date of formal confirmation. Lawson's name had been included in the list for the year; but it was impossible to confirm the election under the statutes of the Society. Seldom has fate intervened in the peaceful walks of science in more dramatic fashion. It has cut off a life full of promise at the very moment of double achievement. Happily, the list of candidates selected for Fellowship of the Royal Society was published in time for him to have been aware of it, and to have received the congratulations of the many friends he had made for himself in Australia. Escorted by these, he was buried in the South Head Cemetery that looks out seawards over the mouth of Sydney Harbour, which he had entered as a stranger thirteen years before on taking up his appointment to the Chair of Botany.

Professor Lawson was elected Fellow of the Royal Society of Edinburgh in 1910. His communications to the *Transactions* were numerous and valuable. They included three Memoirs on Cytology (1911-1912), two on the Gametophyte Generation of the Psilotaceæ (1917), and last, but perhaps the most effective of all, a Memoir, with eight plates, on "The Life-History of *Bowenia*" (1926). It is understood that he had in an advanced state a similar Memoir on *Macrozamia*. In recognition of the

value of those papers which fell within the period 1916–1918, together with previous papers on Cytology and on the Gametophytes of various Gymnosperms, he was awarded the Makdougall-Brisbane Prize. Thus, in every sense, excepting that of administrative office, Lawson was one of ourselves in this Society.

Abercrombie Anstruther Lawson was born in the Kingdom of Fife, and entered Glasgow University as a medical student. After passing through the course of Elementary Botany, in which his artistic skill had already attracted attention, he withdrew from Glasgow and entered the University of Berkeley, California, where he came under the influence of such stimulating teachers as Setchell and Osterhout. Graduating as Master of Science in 1893, he became instructor in Botany, having already entered on a career of research. It was during this period that he accompanied Setchell on an Algological expedition to the Aleutian Islands. Later, he studied at Stanford University, at Chicago, and at Bonn, with published results which led to his appointment, in 1907, as Lecturer in his old University of Glasgow. But before this date he had made a place for himself in Cytology and in the study of the Gymnosperms. He had collected material for the latter during the Californian period, on expeditions with tent and pack-horse, in the Western mountain ranges—an experience which, doubtless, proved useful in later years in Australia. He thus came to Glasgow in 1907 well equipped for the work of a large and active department.

During the five years in Glasgow he took his full share in the official routine, though duties were so distributed as to leave reasonable time for research. Incidentally, he left his permanent mark in the Botanical Society which he founded, especially in the interests of the students within the Department. His own researches at first continued along the line of his thesis at Berkeley, on the behaviour of the Pollen-mother-cells of *Cobæa* (*Proc. Calif. Acad. of Sci.*, 1898, i, 5), and of *Gladiolus* (*Bot. Gaz.*, 1890, xxx, 145); he had also used his time at Stanford in studying spindle-formation (*Bot. Gaz.*, 1903, xxxvi, 81). These studies naturally led to the Memoirs on Synapsis, Nuclear Osmosis, and Chromosome Reduction, published in our own *Transactions* in 1911–12. The theoretical views in the later of these memoirs have not been universally accepted; but the work itself was conducted with a perfect technique, while the illustration was of that high order which characterised all his work.

Lawson's name will be chiefly associated with the study of the Gymnosperms. He made elaborate studies of the propagative details in many genera, and his cytological skill combined with beautiful pencil-work

fitted him specially for their exact record. He worked specially upon eight genera of conifers, in America and in Glasgow; and finally, in Sydney, upon the peculiar genera of the Australian Flora. Most of the results were published in the *Annals of Botany*, but latterly in the *Proceedings* of the Linnæan Society of New South Wales (*Microcachrys* and *Phærosphæra*, 1923). These memoirs together form a body of securely observed and recorded fact, which has already been widely drawn upon by other writers. But it was Lawson's intention to have gathered together his results into a collective work upon the Coniferales; indeed, the very time when he became free from the distractions of building and organising a department offered the opportunity for carrying this into effect, but, unhappily, death intervened.

His latest contribution to the knowledge of the Gymnosperms was, however, the most complete and striking of the whole series. In 1926 this Society published in its *Transactions* "The Life-History of *Bowenia*, a genus of Cycads endemic in Australasia" (vol. liv, p. 337, 8 plates). This is a work already highly estimated by authorities well qualified to judge. It combines a searching examination of the propagative organs, based on bi-weekly collections of material, recorded with that accurate observation of cytological detail which characterised all his work. The most striking result is the detailed description of the post-syngamic phases. He tells how the nuclear fusion in *Bowenia* remains incomplete, as witnessed by the paired spindles, with separate chromosomes. This demonstration in the large zygotes of *Bowenia* is certainly one of the most complete hitherto afforded. The memoir had hardly had time before his death to enhance that claim to recognition which was its due.

Two memoirs also published in our *Transactions* related to the "Gametophyte generation of the Psilotaceæ" (vol. li, 1917, 3 plates; vol. lii, 1917, 5 plates). Here Lawson described the structure of the mycorrhizic Gametophyte in both the living genera, hitherto very imperfectly known, together with full details of the sexual organs. The early embryology of *Tmesipteris* was also touched upon, though it was more fully described later by Holloway, from New Zealand. The embryology of *Psilotum* still awaits detailed observation.

It is thus apparent that in addition to having secured a fine departmental building, and founding a school whose activity is witnessed by a highly creditable list of published researches, Lawson had himself given the stimulus of productive example. It may be admitted that much of his work was detailed and analytical rather than constructive. It is not given to every man equally to originate new patterns in the theory of

his science. To some it falls rather to fill in the blanks; and this is what Lawson has done with singular artistic effect, combined with honest and trustworthy recording, under the best laboratory technique. Placed suddenly, at an age when his powers and scientific equipment were at the full, in surroundings not yet sufficiently exploited, he was at his death busily engaged in investigating the peculiar features of the Australasian Flora, in somewhat the same way as Treub had done in the still richer field of Java. A term has been abruptly imposed on his activities at a time when his friends may well have expected that a more positive and constructive phase of his career would have naturally opened before him.

Passing from this technical story of Lawson's scientific career to the social, we learn from the obituaries in the Sydney press, no less than from private letters from his friends, that he had in his thirteen years of office in Sydney gained a strong position, not only in the councils of the University, but also in the wider circle of life of a great city. Always somewhat of an enigmatic personality, by reason of innate reserve, his flashes of humour, and his delicate and discriminating artistic sense had won for him a place in the affections of his colleagues and fellow-citizens that appears to have been peculiarly his own. He was not merely the Professor of Botany, but a figure in that social life of Sydney which found a natural centre in the club-house. In cities where university life is a relatively young and nascent thing, this may be of untold value academically. It tends to weld the college firmly into the position which it should hold in any large and developing community. Thus sociability itself, of the type which Lawson possessed, may be accounted a positive academic asset, of special value in the larger life of a great trade centre like Sydney. His premature death has removed from the University something more than an effective Investigator and successful Head of a Scientific Department.

F. O. BOWER.